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AN INTRODUCTION TO THE STUDY OF  
TERRA SIGILLATA



# SKETCH-MAP

SHOWING THE

## SITES OF MANUFACTURE

OF

## TERRA SIGILLATA

WITH INDICATIONS OF THE MAIN TRADE-ROUTES

*Potteries are shown thus: LEZOUX, x.*

*Other Roman sites, e.g.: Lyons, Haltern, VESONTIO*

*Roman roads: ————*

*Limes: =====*





AN INTRODUCTION TO  
THE STUDY OF  
TERRA SIGILLATA

TREATED FROM A CHRONOLOGICAL STANDPOINT

BY  
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AND  
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1920





TO THE MEMORY OF  
JOSEPH DÉCHELETTE  
SCHOLAR AND PATRIOT





## PREFACE

AT an early stage of our excavations at the Roman station of Margidunum in Nottinghamshire we were struck by the difficulties inherent in the study of Terra Sigillata, and especially by the necessity of laboriously collating innumerable references to scattered memoirs in many languages besides our own. It seemed to us therefore that a real need existed for a work in the English language, which would present in a systematic and comprehensive manner all the chief points of importance in connection with Terra Sigillata in its various aspects, laying special emphasis on the chronological importance of the forms of the vessels and their style of decoration. Throughout the preparation of this work we have received much encouragement and valuable advice from our friend, Mr. F. W. Dobson of Nottingham; his practical interest in archaeology has done much to ensure the publication of this book.

We desire also to express our especial indebtedness to Messrs. Donald Atkinson, J. P. Bushe-Fox, George Clinch, James Curle, J. Déchelette, F. Lambert, Thomas May, H. B. Walters, John Ward, S. Reinach, H. Dragendorff, R. Forrer, K. Hähnle, R. Knorr, S. Loeschcke, W. Ludowici, F. Oelmann, G. Reubel, E. Ritterling, and Fräulein Fölzer; to the Trustees and Principal Librarian of the British Museum, the Society of Antiquaries, the Society for the Promotion of Roman Studies, the Society of Antiquaries of Scotland, the Society of Antiquaries of Newcastle, the Committees of the Colchester and Silchester Museums; and to Messrs. MacLehose, Jackson & Co. of Glasgow who published Curle's important volume on Newstead, and Messrs. Alphonse Picard et Fils of Paris, who produced Déchelette's monumental work, *Les vases céramiques ornés de la Gaule romaine*. In all cases full acknowledgment of the sources from which we have drawn material is specifically given both in the text and in the description of the plates.

Lastly, we wish to express our deep appreciation of the invaluable assistance of Mr. Arthur G. Wright, Curator of the Colchester Museum, who has always been ready to place his extensive knowledge, derived from the important material under his care, at our disposal.

FELIX OSWALD.

T. DAVIES PRYCE.

NOTTINGHAM, 1920.



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## EXPLANATORY NOTE.

AN explanation of the abbreviations employed in this work will be found in the first part of the Bibliography, Chapter IV. and other sections. Type-figures and ornaments are referred to under the numbers assigned to them by various authors, thus : (Déch. 504), (Fölzer 960). References to Déchelette's Inventory of Potters' Stamps (i. p. 247 *sqq.*) are made thus : (Déch. i. No. 36). In general, the stamps of potters are printed in heavy type ; their names in small capitals.

Our own illustrations are indicated in brackets, *e.g.* (Pl. II. 3) ; otherwise the source is given immediately before the reference, *e.g.* (Knorr, *Aislingen*, Pl. III. 2) or Oelmann, *Niederbieber* (Pls. VII. and VIII.).

## LIST OF PLATES

NOTE.—In drawing the figures illustrated in this book, care has been taken to depict complete vessels, whether plain or decorated, as closely as possible to the scale of one-third, whilst all decorative details have been drawn to the scale of one-half.

In some instances, where sufficient evidence permitted, a certain degree of restoration has been made so as to present the design in its original form.

Incomplete vessels have also been restored, wherever possible, as the result of making careful measurements and collating all available material.

### I. Map.

### II. Italian Sigillata.

III., IV., V., VI. Dragendorff Form 29.

VII., VIII., IX., X. Dragendorff Form 30.

XI., XII., XIII., XIV., XV., XVI., XVII., XVIII. Dragendorff Form 37.

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XX. Dragendorff Forms 37 and 30; Déchelette Form 71.

XXI. Dragendorff Form 11; Déchelette Forms 64, 65, 66, 67 and 68; Knorr Form 78.

XXII. Metal vessels.

XXIII. Pergamene, Megarian, Italian and Native Ceramics.

XXIV. Italian Sigillata; Egyptian Lotus Bowl.

XXV. Italian and Provincial Sigillata; *Ara Pacis Augustae*.

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XXVII. Metal vessels and types.

XXVIII. Minoan, Megarian, Italian, Marbled and Native Ceramics; Déchelette Form 70.

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XXXVII. Evolution of St. Andrew's Cross, Nautilus *motif*, etc.

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- XL. Dragendorff Form 24/25.
- XLI. Dragendorff Form 16.
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- XLIV. Ritterling Type 1.
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  - LXII. Ludowici Types SMa, SMb, SMc.
  - LXIII. Dragendorff Form 32.
  - LXIV. Ludowici Types Ta', Tk, Tm', Tr, Ts, Ty.
  - LXV. Ludowici Types Tf, Ti', Tk', Tn'.
  - LXVI. Miscellaneous platters, Ludowici Types Tc', Th' ; flat platters.
  - LXVII. Miscellaneous plates and cups.
  - LXVIII., LXIX. Miscellaneous plain forms.
  - LXX. Ink pots.
  - LXXI. Ritterling Type 12 ; Curle Type 11 ; May Type 10 (*York*, Pl. IX., 10).
  - LXXII. Dragendorff Form 38.
  - LXXIII. Curle Type 21 ; Dragendorff Form 43.
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  - LXXV., LXXVI. Rouletted Sigillata.
  - LXXVII., LXXVIII. Incised Sigillata.
  - LXXIX., LXXX., LXXXI. Sigillata chiefly decorated *en barbotine*.
  - LXXXII., LXXXIII. Sigillata jugs, etc., chiefly decorated with incisions or *en barbotine*.
  - LXXXIV. Sigillata decorated with applied reliefs.
  - LXXXV. Rare examples of Decorated Sigillata.



## CHAPTER I

### INTRODUCTORY

THE importance of a careful study of the pottery which occurs in such profusion on all Roman sites is now fully recognised by British and Continental students of the Imperial period, and no investigator can afford to neglect this branch of his subject.

Next to datable inscriptions, there is, perhaps, no relic of Roman occupation which yields such valuable chronological evidence as *Terra Sigillata*—the red-glazed fabric of Gaul and other provinces—commonly known as “Samian” ware.

The variations and transmutations of its forms, the changing character of its decorative designs in successive periods, and the marks of its potters, tell a chronological tale almost, if not quite, as convincing as the transitions of the column and arch in architecture.

Although the investigation of *Terra Sigillata* is by no means complete, a vast number of reliable data have already been accumulated, which are of great material assistance in elucidating the history of a period for which literary evidence is frequently somewhat scanty. It is indeed no exaggeration to state that the ceramic results of certain excavations have done much to substantiate, modify, or reconstruct views which had hitherto been based upon historical evidence alone.

We may therefore hazard the conjecture that, in proportion as our knowledge of Roman pottery becomes more precise and definite, so, *pari passu*, some modification will be necessitated in many opinions (based too exclusively on occasional and fragmentary written sources) so as to bring them into alignment with archaeological discovery.

The scope of this work is confined almost wholly to the study of such details of technique, form, decoration and design occurring in *Terra Sigillata* as can be of assistance for dating purposes.

No attempt is made to give an exhaustive description of all the types, but a comparatively full account is given of those which possess some definite chronological value.

Owing to the fact that early Gaulish *Sigillata* is essentially a development of Italian or Arretine fabric, a short descriptive section relating to this ware

has been included. In a further chapter the evolution of *Terra Sigillata* is treated on broad general lines and the more ultimate sources of inspiration are discussed, stress being laid more especially upon the continuity of certain ornamental *motifs* in ancient ceramic art ; in short, a kind of archaeological embryology, so to speak, has been attempted.

Frequent allusion is made in the course of this work to various points of technique as revealed in form, ornament, paste and glaze, but the process of manufacture has been regarded as outside the scope of this volume, and is only made the subject of passing reference.

The method, by means of which a chronological estimate of Sigillata evidence is arrived at, is based in its essentials on the determination of "site-values." Thus the exclusive or predominant occurrence of certain types on properly excavated sites, such as Haltern, Hofheim, Newstead and Niederbieber, which can be dated by external historical evidence, affords a valuable aid to the determination of the period and distribution of these particular forms of Sigillata. Light is also thrown in this way on the limits of activity of the potters whose names are found stamped on these wares, as well as on the period when certain modes of decoration were in vogue. In like manner the evidence furnished by sites known to have been destroyed or deserted at a definite date, such as Mont Beuvray, Pompeii and Torre Annunziata, is capable of similar application. Finally, the *terminus a quo*, afforded by Xanten, Neuss, Colchester, London, Rottweil, Huntcliff and other settlements, is of great assistance in arriving at chronological determinations. It is important, however, to recognise that, in the present state of our knowledge, this method must be applied with caution and indeed with certain reservations, for many details of the ceramic art of Imperial Rome still lie buried beneath the soil. It is therefore obvious that special care must be taken in weighing *negative* evidence, as well as in controlling evidence afforded by transitional and developmental changes in form and design.

Wherever possible, a definite statement in the text has been fortified by reference to some potter of well-attested date, or to a datable site, or to both. In like manner, the illustrations for the most part are taken either from bowls of well-known potters or from vessels and sherds found on sites the periods of which can be assigned, with a fair degree of accuracy, to a definite date.

In this way it has been our endeavour to produce a reasonably concise and reliable guide to the study of provincial Sigillata. Particular care has been taken to draw all the figures to scale, so as to permit of exact comparison.

Finally, we feel it necessary to make some excuse for a certain amount of repetition, which has been unavoidable in our attempt to make each section of the work as complete as possible, so as to facilitate reference by students of this subject.



## CHAPTER II

### GENERAL DESCRIPTION

It has been generally admitted by all who have written on the subject that very considerable difficulties exist in the choice of an appropriate title for the red-glazed ware which is so frequently found on Roman sites in the western provinces of the Empire. It is now incontrovertible that this fabric was manufactured only in Italy and the western Roman provinces,<sup>1</sup> so that the term " Samian," as applied to this ware by the older archaeologists and even by some of the present day, is therefore clearly a misnomer.

Strong Hellenistic influences can, it is true, be traced in many features of Roman ceramic art, but Samos cannot be claimed to have exercised in this respect any greater or more dominant position amongst the centres of Greek pottery than Bœotia<sup>2</sup> or Pergamum, with their bowls decorated in relief, or even Myrina and Priene.

Greece and Asia Minor would indeed seem to have been the chief centres of origin for the prototypes of red-glazed ware; and it was from these centres that their modifications became diffused to take fresh root in Italy and thence in Gaul.<sup>3</sup>

The term " Terra Sigillata " used by Continental writers as an alternative to " Samian " ware is preferable, and has therefore been adopted in this work; yet it is only partially correct, for if it were strictly applied it would have to be confined only to those forms of Roman red-glazed ware

<sup>1</sup> C. Roach Smith (*Journ. Brit. Archaeol. Assoc.*, iv. 1, 1849, and *Collect. Antiq.*, i. p. 150 *sqq.*, vi. p. 71, 1867) was the first to indicate the Gaulish origin of the bulk of the so-called Samian ware found in Britain.

<sup>2</sup> The so-called " Megarian " bowls were almost certainly not made at Megara. A part of them—those known as Homeric vases—originated in Bœotia, probably at Aulis or Chalcis. Nevertheless, it is convenient to speak of a " Megarian type " of bowl.

<sup>3</sup> The migration of the technique of relief-ware from Asia Minor to Italy and Gaul finds a close and interesting parallel in the approxi-

mately contemporary migration of green-glazed ware from Asia Minor (Tarsus) and Alexandria to the Allier district of Gaul (St. Rémy-en-Rollat, Vichy, Gannat and Lezoux). Subsequently, the practice of this technique followed an easterly trend into Germany (Cologne, *c.* 100 A.D.) and even as far as Pannonia (third to fourth centuries) in the same way as the red-glazed ware. The technique of the green-glazed ware was also to a great extent similar to that of the red-glazed fabric; *e.g.* in the use of moulds with impressed designs, and of applied figures, etc., and both techniques were obviously inspired by prototypes in beaten metal (silver and bronze).

which are decorated with stamped figures or patterns (*sigilla*), *i.e.* designs stamped on the interior of moulds or applied to the exterior of vessels.<sup>1</sup>

But much of this red-glazed pottery is quite plain and devoid of decoration, whilst some of it is decorated *en barbotine*, and some again by rouletting or by notches and incisions in imitation of cut glass. Even the red-glazed ware displaying a painted pattern cannot consistently be excluded. Although considerable exception may on these grounds be taken to the Continental term "Terra Sigillata," yet it presents marked advantages over the misnomer "Samian ware," particularly since this kind of pottery, when found in Britain, cannot be adequately studied without constant reference to similar discoveries in Italy, France, Spain, Germany and the Netherlands.

The essential characteristics in texture of Terra Sigillata consist in its fine red or yellowish-red paste and its red or yellowish-red surface-glaze, the lustre of which often rivals that of sealing-wax.

It may be conveniently classed in two natural categories:

- (i) Italian Terra Sigillata.
- (ii) Provincial Terra Sigillata.

#### (i) ITALIAN TERRA SIGILLATA.

Although Italian Sigillata—the so-called Arretine ware—was chiefly manufactured at Arretium (the modern Arezzo), it was also made at other centres in Italy, such as Puteoli, Modena and perhaps Rimini.

The chief and most characteristic period of the activity of the Arretine potteries may be assigned to the last third of the first century B.C. and the first two decades of the first century A.D. Thus, Italian Sigillata is pre-eminently the typical ceramic product of the Augustan age.

The earliest Arretine vessels, which date from about the middle of the second century B.C., resembled the Campanian ware which preceded them in being coated with a black glaze in imitation of metal. The transition from the black to the characteristic red glaze did not occur until about the beginning of the first century B.C.

Although Italian Sigillata continued to be manufactured in the first century A.D., even as late as the Flavian period, its exportation into the provinces had almost ceased before 40 A.D.<sup>2</sup> Whilst Arretine ware is the only type of Sigillata which is represented at the Augustan site of Haltern (II B.C.-I6 A.D.), its place during the Claudian period at Hofheim (40-51 A.D.) had been practically usurped by South Gaulish fabric, and it

<sup>1</sup> Some writers would even restrict the use of the term solely to vessels with moulded decoration, but evidence is in existence to show that the *appliqué* method originated, so far as Gaul is concerned, in a tentative endeavour to obtain a higher relief for some of the designs in moulded decorated vessels,

and good examples of this composite technique occur (on bowls of Form 37) at Mardunum and Holt.

<sup>2</sup> Exceptionally the stamps of late Italian potters may be found in Britain, *e.g.* L. R. PISANVS (Cambridge), who was probably at work as late as the Flavian period.

only occurs sporadically at Aislingen—a site which was first occupied in the reign of Tiberius.

In Britain Italian Sigillata is relatively infrequent, but, in addition to the potters' stamps hereafter enumerated, fragmentary specimens of this ware, both plain and decorated, are of occasional occurrence on southern sites, such as London (*e.g.* the crater, Form II, Pl. XXVIII. 17), Colchester, Silchester, Bicester, Heybridge (Essex) and Oare (Wiltshire).<sup>1</sup> Some of this ware was doubtless brought over by the conquering Romans in the Claudian period and must be placed in the category of "survivals," but much of it should probably be regarded as indicating a definite penetration of Pre-Claudian Roman culture.

In Britain the stamps of the following Italian potters have been found :

*London* : ATEI "in planta pedis" (CIL., VII. 1336, 96), ATII or ? ATEI (Ibid. 98), HILAR (Ibid. 506), C. AMVRI "in planta pedis" (Walters, C.R.P. L. 168), CORNEL (Ibid. L. 160), <sup>SEC</sup>VNDI (Ibid. L. 167) and XANTHI "in planta pedis" (Ibid. L. 169).

*Cambridge* : The Cambridge Museum<sup>2</sup> contains a crater by XANTHVS, the slave of CN. ATEIVS, with the stamp  $\begin{array}{c} \text{CN. } \widehat{\text{TEI}} \\ \leftarrow \leftarrow \leftarrow \leftarrow \\ \text{XANTHI} \end{array}$  (Pl. II. 2), found at Foxton, and also a fragment stamped L. R. PIS "in planta pedis" (CIL. 894).

*Colchester* : XAN (?) in Grave group 68 (Joslin Coll.).

*Silchester* : The following stamps from the workshop of ATEIVS : ATEI (3), ATEI (2), ATEI M[AHETIS], CN. ATEI,  $\begin{array}{c} \text{CN. ATEI} \\ \text{EVRVALVS} \end{array}$ , CN. ATEI E[V]H[ODI], and XANTI ; also the stamps of AC[ASTVS],  $\begin{array}{c} \text{AEN} \\ \text{AVIL} \end{array} \left[ \begin{array}{c} ? = \text{MENA} \\ \text{AVILLVS} \end{array} \right]$ , APROI,  $\widehat{\text{IVCVNDI}}$ ,  $\widehat{\text{PILEMV}}$ , SEX→→,  $\widehat{\text{SILVA}}$  and  $\widehat{\text{VITLVS}}$ .<sup>3</sup> ANNI

*Oare*, Wiltshire : the mutilated marks of AT[ , and ]PLEV.

*Heybridge*, Essex : the stamp  $\widehat{\text{PER}} \left[ \begin{array}{c} \text{T} \\ ? = \text{PERENNI/TIGRANI} \end{array} \right]$ .

*Pleshey*, Essex :  $\begin{array}{c} \text{CNATEI} \\ \text{ZOILI} \end{array}$  *Barrington*, Cambridge :  $\begin{array}{c} \text{CRESTIO} \\ \text{TITI} \end{array}$ .<sup>4</sup>

<sup>1</sup> May (York), Pl. VI. 17, illustrates a dish (Drag. 22) as Arretine ware.

<sup>2</sup> See Walters, *Cambridge Antiq. Communic.*, xii. (1906-7), p. 107 sqq.

<sup>3</sup> The stamp of this Puteolan potter occurs at Silchester on (a) an early or Tiberian type of the Gaulish form 29, and on (b) a fragment of a flat plate with a well-marked footstand, which is approximately triangular in section. This class of footstand is not uncommon in

Italian Sigillata and in early South Gaulish fabric, and is quite unlike the flat low footstand of Belgic platters. Both vessels have the identical stamp of VITLVS, the same brittle, yellowish-grey, micaceous clay and poor glaze which is rubbed off at the angles. The problem of the VITLVS bowl, Form 29, is discussed at the end of this section (p. 9).

<sup>4</sup> Haverfield, *Proc. Camb. Antiq. Soc.*, lxviii. pp. 53 sqq., on a cup, Loeschcke Type 7.



These examples appear to complete the somewhat scanty list of Italian potters' marks hitherto found in Britain. The majority of the above-named potters were at work in the reign of Augustus, and it is probable that their activity had ceased before the accession of Claudius. The only undoubted exception is that of L. R. PISANVS, who appears to have been working as late as the Flavian period.<sup>1</sup>

It is interesting to note that the stamps of ACASTVS, ATEIVS (and his slaves EVHODVS, MAHES and XANTHVS), AVILLIVS, CORNELIVS, HILARVS, IVCVNDVS, SECVNDVS, SEXTVS ANNIVS, TITIYS and VITLVS occur at Haltern.

The occurrence of the stamps "*in planta pedis*," however, indicates a somewhat later date of manufacture for some of the British examples.<sup>2</sup>

The texture of Arretine ware is somewhat soft and tender, whilst the glaze is usually dull red, with a tendency in many examples to a pale or yellowish-red tint. These characteristics apply particularly to Arretine Sigillata of the Augustan period. At Puteoli, where a branch of the Arretine industry flourished, the glaze is, as a general rule, higher than at Arretium, often rivalling the "sealing-wax" red glaze of the South Gaulish ware of the best period of the first century A.D.

Italian Sigillata bears little direct evidence of the influence of the painted pottery of Greece, whether in form or in decoration. Its immediate prototypes must be sought in the later relief products of Bœotia, Pergamum and Southern Italy (third to second century B.C.), and in the metal work of Asia Minor and Alexandria. The beautiful silver "myrtle-cup" or cantharos (Pl. XXII. 9) from Alesia, dated to the period of Caesar's conquest of Gaul, affords a good example of the influence of toreutic art upon the forms of Italian Sigillata. Indeed, the influence of the metal-worker upon the forms of Sigillata in general can still be traced down to even so late a date as the early part of the second century A.D., as in the vessels by LIBERTVS of Lezoux (cp. Pls. XXII. 3, and XXVII. 4, with Pls. XXI. 5, and XX. 6).

The dependence of Italian Sigillata on toreutic art is also to some extent evident in its decorative types, particularly in those vessels which are ornamented with naturalistic reliefs. A comparison of the metal vessel from Bosco Reale (Pl. XXII. 11) with the beautiful crater by ATEIVS (Pl. II. 3) graphically illustrates this interdependence, and a specific instance is furnished by the hanging fishes in the Arretine vessel (Pl. XXIV. 6), which have their counterpart in metal work (Schreiber, *Alexandrinische Toreutik*, p. 325, Fig. 63, our Pl. XXVII. 12).

<sup>1</sup> See this potter's imitation of Form 29, Walters (*op. cit.* Pl. IX. L. 138). Another late Italian imitation of this Gaulish form is figured by Behn (*Röm. Keramik*, Fig. 11); see also Déchelette, i. Figs. 74, 75, 76.

<sup>2</sup> This form of stamp may be regarded as conclusive evidence of workmanship of the first century A.D. It appears to have come into fashion late in the reign of Augustus or early in that of Tiberius. Only one example was found at Haltern.

On the other hand, the close relationship between contemporary sculpture and Italian Sigillata in respect of design is well illustrated by a comparison of the scrolls and garlands on the frieze of the *Ara Pacis Augustae* (Pl. XXV. 8, 9, 11) and those of Arretine ware (Pl. XXIV. 1, by P. CORNELIVS/ANTIOCVS ; 2, by PANTAGATVS ; Pl. XXV. 7).

But in dealing with the naturalistic reliefs of the Augustan era it should be remembered that the workers in stone, metal and clay, although subject to undoubted interinfluence, owed their common inspiration to the prevailing artistic impulses of the age. With regard to figure-types, the chief source of inspiration in the case of Arretine designs is to be found in the so-called Neo-Attic reliefs of about the same period.

The designs on Arretine ware are usually delicately moulded and figure-subjects predominate. The figures, which are mainly of Hellenistic origin, commonly consist of single types, such as Mænads, Satyrs, Fauns, and dancing priestesses, or else display hunting, erotic and banqueting scenes. Sometimes a definite and connected subject is illustrated, such as Alexander slaying the lion (Walters, *op. cit.* L. 101), or the Fall of Phaethon by BARGATES, a slave of M. PERENNIVS (Boston Museum). But, as already indicated, the Arretine potters were influenced by the wave of naturalism which swept over Italy in the Augustan age ; and occasionally PERENNIVS, but more particularly CORNELIVS, produced vases decorated almost exclusively by ornamental designs. Good examples are furnished by the beautiful vine-scroll of M. PEREN/TIGRANI (Pl. XXIV. 3), the garlands of P. CORNELIVS/ANTIOCVS and PANTAGATVS (Pl. XXIV. 1 and 2), depicting acorns, fir cones, figs, quinces and poppy heads or pomegranates, and finally the two craters by ATEIVS (Pl. II. 3 and 4), in which storks and grasshoppers (Fig. 3) and an acanthus scroll (Fig. 4) with lizards, grasshoppers, cicadas, hawk-moths and cuckoos are faithfully represented. But the ornamentation, even on late vessels, may be purely conventional (Pl. II. 2, CN ATEI/XANTHI) ; and even entirely mythological subjects continued to be represented, such as the Fall of Phaethon by BARGATES, already referred to.

The designs of Puteolan decorated bowls show a considerable similarity to those in use at Arretium, as in the crater from Capua (Walters, *op. cit.* L. 54), but on the whole they approximate more closely than those of Arretium to the early decorated Sigillata of South Gaul (cf. Pl. XXIV. 8-10, with Pl. III. 5 SENICIO, 6 SCOTTIVS), and it is not impossible that the early decorative designs of South Gaul may have been more directly influenced by Puteolan than by Arretine ware.

In general, the scrolls, wreaths and festoons on Arretine ware were composed of separate, detached leaves or flowers (Pl. II. 5, 8), but a continuous, winding scroll with a main, central stem was not uncommon, as in both the earlier and the later work of PERENNIVS and his slaves (Pl. XXIV. 3 TIGRANVS, 4 SATVRNIVS), in the bowl by ATEIVS (Pl. II. 4),

and in other Italian Sigillata (Pl. XXV. 7 ; Pl. XXIII. 5 ; see also Walters *op. cit.* L. 70).

The following ornamental types are worthy of special notice, since they were subsequently adopted by Gaulish potters :

- (1) The ovolo, as an upper border to the design (Pl. II., 1, 2, 4, 8).
- (2) Bead-rows (Pl. II. 3).
- (3) Festoons (Pls. II. 5 ; XXVI. 2).
- (4) The conventionalised " nautilus " design (Pl. II. 2) often referred to as a " fern frond " or " fish bladder."

It will be shown in the section on Evolution that this ornament is more probably derived from the curled arms of the Argonaut or Paper-nautilus.

This list is by no means exhaustive, and reference should be made to the section on Origin and Development.

Although this work deals principally with Provincial Terra Sigillata, the foregoing brief description of Italian Sigillata has been considered necessary in view of the fact that it must in the main be regarded as the prototype for the South Gaulish potters.

Italian influence can be traced more especially in the plain forms of Rutenian Sigillata ; and in the chapter dealing with these forms the Arretine prototypes will be figured wherever the connection can be reasonably established. In the case, however, of the decorated Provincial Sigillata this influence of form is not so definitely pronounced, with the single exception of the crater or calyx (Drag. Form 11), which was closely copied by the early Gaulish potters (Pls. XIX. 1 ; XXI. 1).

The three decorated forms of Italian Sigillata which may be regarded as playing the part of prototypes—in varying degrees—for early Gaulish ornamented vessels are the following :

- (1) The crater or calyx.
- (2) The cylindrical bowl.
- (3) The hemispherical bowl.

Three distinct types of crater were manufactured contemporaneously in the Augustan age :

*Type A.* Drag. Form 11 (Pl. II. 3), in which the body of the vessel is hemispherical and the rim widely everted. This form, as has been shown, was directly copied by the provincial potter.

*Type B.* The Foxton type, Loeschcke Type 19 and Déchelette I., Fig. 10, in which the body is slightly constricted and divided into two zones by a more or less central and (generally) rouletted moulding. The rim is rouletted, but shows no eversion (Pl. II. 1, 2, 4). This form was not figured by Dragendorff.



*Type C.* Hähnle's types C and D,<sup>1</sup> in which the body forms an approximately deep or shallow hemisphere respectively, and the rim is rouletted but not everted (Pl. XXVI. 1, 2).

In the earliest South Gaulish vessels of Form 29, the central rouletted moulding of the crater Type B, the hemispherical outline of the crater Type C, and the rouletted rims of both these types recur (Pl. III. 4-7). The carination, which is so characteristic of the later examples of Form 29, is, however, occasionally already present in the Augustan crater Type B (Pl. II. 1).

It would thus appear that of the three types of Augustan crater one of them, viz. Type A, was directly copied, whilst several features of the two other types, viz. B and C, were embodied in the new Form 29 by the South Gaulish potters.

It is furthermore probable that intermediate variants of the crater existed, which bore a closer approximation to the Gaulish Form 29 than the types of crater enumerated above. Four extremely suggestive fragments are illustrated (Pl. XXIV. 4 SATVRNINVS, 5; Pl. XXVI. 4 BAR-GATES, 9). Two of them are the products of the later slaves of M. PERENNIVS.

They all display a plain central moulding, bordered above and below by a bead-row, and surmounted by a comparatively narrow decorated zone. All these features are constant characteristics of the Gaulish Form 29.

In this connection some allusion must be made to the interesting bowl Form 29, by the Puteolan potter VITLVS (Pl. XXVI. 3), inasmuch as it appears to furnish a connecting link between Italian and Provincial ceramic art. In form this vessel possesses all the characteristics of the earliest or Tiberian examples of the bowl 29, with the trifling exception that the usual internal groove is placed at a somewhat lower level. In the matter of decoration, however, it displays both Italian and early South Gaulish features; thus the upper frieze is ornamented with a symmetrical winding scroll with sessile leaves, and the concavities of the scroll are filled in with a leaf or a bird—a not uncommon form of decoration in early examples of Form 29, and even recalling the scroll of the ATEIVS<sup>2</sup> crater at Mainz (Pl. II. 4). On the other hand, the decoration of the lower frieze is entirely Italian in feeling, consisting of garland-festoons and cupids. Very similar cupids are to be found in the Xanten crater by XANTHVS (Pl. XXVI. 3A) and on the Louvre crater (Pl. XXVI. 2). In the latter the same class of garland is also represented.

The bowl is clearly transitional in character. The potter VITLVS belonged to the NAEVIVS group of Puteoli. His stamp occurs at Haltern,

<sup>1</sup> Die Relief-Kelche aus Haltern, *Mitt. d. Altertumskom. für Westfalen*, vi. 1912.

<sup>2</sup> Note in the VITLVS bowl the terminal rosettes issuing from the bifid leaves—a unique occurrence in Provincial Sigillata.

Similar terminal rosettes of the bifid leaf occur in the XANTHVS/ATEIVS crater. In like manner terminal leaves are added to the bunches of grapes in the Arretine bowl, Pl. XXVIII. 13.

$\frac{\text{VITLVS}}{\text{NAEV}}$ , and is assigned there to the last period of the occupation. Thus he probably worked at a date to which the inception of the bowl 29 may be assigned. Whether the Silchester bowl was produced in Italy or South Gaul, it is difficult to decide. The poor technique, and the character of the clay and glaze (see p. 5) suggest that it was somewhat of the nature of an experiment, and it may well be regarded as one of the earliest efforts in decoration in South Gaulish ceramic art. The conjecture is therefore hazarded that this Puteolan potter migrated to South Gaul, and in this connection it is perhaps not without significance that we find similar potters' stamps of FELIX, PRIMVS and TERTIVS, both at Puteoli and in South Gaul.

Furthermore, there are also at Silchester two fragments of Form 29 composed of an exactly similar yellowish-grey micaceous clay as that of the VITLVS bowl.

Our illustrations of the crater (Pl. II. 1-4) are taken from bowls found at Haltern, Foxton and Mainz. They all emanate from the workshop of the Augustan potter ATEIVS and his slaves EVHODVS and XANTHVS.<sup>1</sup> Thus they were manufactured in the period immediately preceding the rise of the South Gaulish potteries.

No very obvious connection can be traced between the cylindrical forms of Italy and those of Gaul. The cylindrical bowl of "Megarian" type (Pl. II. 6) found at Melos very closely approximates to the Gaulish Form 30. It is made of red unglazed clay and is decorated in relief; it appears to indicate that a direct Hellenistic influence, as well as that derived through Italian sources, bore a part in the development of South Gaulish Sigillata.

"Megarian" and Arretine hemispherical bowls may be regarded as the early prototypes of the decorated Gaulish vase, Form 37, but they lacked the definite footstand of the provincial vessel.

## (ii) *PROVINCIAL TERRA SIGILLATA.*

The centres of manufacture of red-glazed ware in the Roman provinces were numerous and widely distributed. They were all confined to the Continent, and, notwithstanding the discovery of isolated moulds in this country, there is, at present, no evidence of the production of this fabric in Britain.

<sup>1</sup> Stamps of the potter ATEIVS are plentiful at Haltern (Loeschcke, *Haltern*, p. 168 *sqq.*), the latest occupation of which is placed as ending in 16 A.D. Now the rarity of the stamps of his slave XANTHVS at Haltern (7), and the relative frequency of these stamps on the continuously occupied, early sites of Xanten, Neuss, Mainz and Vechten, are circumstances pointing to the conclusion that the chief period of this potter's activity falls

in the early years of the first century A.D. This view is supported by the occurrence of XANTHVS stamps "*in planta pedis*" in London and at Poitiers and Grimmlinghausen (CIL, XIII. 10,009, 317). He, however, probably commenced work in the late part of the first century B.C., for his stamp ATEI/XANTHI has been found at Mont Beuvray—a site abandoned immediately anterior to the Christian era (Déchelette, i. p. 16).

The various pottery sites may be conveniently classified under four general categories :

- (A) South Gaulish.
- (B) Central „
- (C) East „
- (D) Trans-Rhenish.

South Gaulish (Rutenian)	<i>La Graufesenque</i> (Condatomagus)	c. 15-100 A.D.
	<i>Montans</i>	c. 15-100 A.D. <sup>1</sup>
	<i>Banassac</i>	c. 40-110 A.D.
Central Gaulish (Arvernian)	<i>Lezoux</i>	c. 40-260 A.D.
	St. Rémy-en-Rollat, chief source of green-glazed relief ware.	
	Lubié la Palisse.	
	Vichy (Aquae Calidae)	
	Luxeuil	c. 80-200 A.D.
	<i>Pottery of Satto and Saturninus</i>	c. 90-140 A.D.
	<i>Heiligenberg</i> , chiefly Trajan-Hadrianic	c. 95-160 A.D.
	<i>La Madeleine</i> , chiefly Trajan-Hadrianic	c. 95-135 A.D.
	<i>Ittenweiler</i> , chiefly Trajan-Hadrianic	c. 100-130 A.D.
	<i>Trèves</i> , chief source of moulded ware of third century	c. 120-260 A.D.
	<i>Rheinzabern</i> , especially active in Anto- nine period	c. 120-260 A.D.
East Gaulish	Lavoye, chiefly	c. 120-140 A.D.
	Les Allieux	c. 120-180 A.D.
	Avocourt	c. 120-180 A.D.
	Compiègne	
	Eschweilerhof	c. 140-180 A.D.
	Blickweiler	
	Remagen	c. 180-220 A.D.
	Sinzig, offshoot of Trèves	
	Vindonissa, chiefly Trajanic	
	Mandeure	
Trans-Rhenish	Heddernheim	
	Bregenz, chiefly Trajanic	
	Westerndorf	c. 160-200 A.D.
	Kräherwald	c. 140-200 A.D.

The dates appended to the pottery sites—particularly those of East Gaul—should be regarded as only tentative approximations. Broadly

<sup>1</sup> The early date assigned to Montans is indicated by the Italic character of much of the work of the potters ACVTVS and SALVETVS, whose moulds have been found at this centre ; note the early technique of the Tiberio-

Claudian 29 (Pl. XXVI. 6) by ACVTVS and of this potter's fabric at Silchester (May, *Silchester*, pp. 199, 200), also that of the fragment of Form 29 at Colchester, 1162.06 by S[A]LV[E]TV.



speaking, the manufacture of provincial Sigillata commenced at La Graufesenque and Montans, and thence followed a north-easterly trend along the valleys of the Rhone, Saône and Moselle. (See Map.)

Provincial Sigillata was exported more particularly to the western portion of the Roman Empire, viz. to all parts of France, to the Rhenish and Danubian frontiers, Britain, Italy, Spain, Portugal, the Netherlands and the African shores of the Mediterranean. Isolated examples have even been found in countries outside the Roman Empire, such as Denmark and East Prussia.

Whilst most of the potteries in South and Central Gaul began to work some time in the first half of the first century, those of East Gaul commenced operations either late in the first century or at a variable date in the second century.

It is of course obvious that the date of exportation cannot exactly correspond with that of origin. Some lapse of time would naturally be required for initial development, and local needs would have to be supplied before a distant market for the wares could be acquired.

The Sigillata of St. Rémy, for instance, had a purely local provenance, and, so far as present evidence goes, never reached the shores of Britain.<sup>1</sup> Similarly, the period of development of a pottery and concomitantly its capacity for an export trade may vary considerably; thus, although the early period of Lezoux, as exemplified in the work of the potter ATEPOMARVS, must be assigned to a date only slightly subsequent to that of La Graufesenque, there is no evidence of a similar extensive area of early exportation.

Whilst the wares of La Graufesenque and other South Gaulish centres are well represented at Hofheim in both the Claudian and Vespasianic periods, those of Lezoux occur only sporadically, and are chiefly present in the later epoch. The same statement holds good with regard to the Flavian period both at Newstead and Rottweil. At Pompeii, destroyed in A.D. 79, the wares of South Gaul still hold the field.

With rare exceptions,<sup>2</sup> it was only late in the first century or early in the second century that Lezoux began to export its products into Britain, where (conversely to the state of things in Belgic and Germanic territories) it continued to maintain its ascendancy over the East Gaulish potteries throughout the second century. The importation of Lezoux wares into this country reached its acme in the Antonine period.

It may be doubted whether Britain received any East Gaulish ware in the first century, but early in the second century, *i.e.* in the Trajan-Hadrianic period, a certain amount of this fabric found its way into Northern Britain

<sup>1</sup> Green-glazed relief-bowls (Form 29) have been found at St. Rémy and Colchester.

<sup>2</sup> The stamp ATEPOM[ARVS] occurs at Silchester, May, *op. cit.* 5c.

Some fragments of Form 29 in the Guildhall Museum, with fine relief, strongly suggest the work of this early Lezoux potter.

and other sites, as evidenced by a bowl of IANVS found at Nether Denton, and by the transitional form 29/37 which has been found both at Corbridge and Nether Denton.

It lies in the very nature of things that the characteristics of a fabric, derived from so many and such widely distributed centres, and extending over a period of some three centuries, must vary considerably, not only in form and design, but also in the texture of the paste and the nature of the glaze. These points will now be dealt with on broad lines, taking the chief sites of production *seriatim*.

(A) *LA GRAUFESENQUE* (*Condatomagus*), near Rodez, Aveyron.

This pottery shares with Lezoux the premier place in the production of Provincial Terra Sigillata. An exact date can obviously not be assigned with certainty to its earliest origin, but since it was sufficiently advanced to export bowls of Form 29 to Mainz, Strasbourg and Aislingen (Pl. III. 4, 5, 6, 7) during the reign of Tiberius, and also supplied them, in plenty, to the Claudian earth-work at Hofheim, it is a reasonable probability to assume that the second decade of our era saw its birth and origin.

The characteristic features of the Sigillata of La Graufesenque, and indeed of that of South Gaul in general, consist almost universally of a well-baked red paste with sharp and glass-like fracture, a surface-glaze with a high mirror-like gloss (due to a higher temperature in baking than in the case of Arretine ware) and a dark-red or cherry-red colour.

These peculiarities constitute the most conspicuous points of difference between South Gaulish and Arretine technique. On the other hand, the earliest decorated bowls of the South Gaulish potters naturally display more resemblance to Arretine Sigillata, both in paste and colour, than is shown by vessels belonging to the best period of La Graufesenque, viz. the second half of the first century, and particularly the Nero-Vespasian period, when the Rutenian technique had attained its highest degree of development. This resemblance is well exemplified in the early decorated bowls, Form 29, by SENECIO and SCOTTIVS (Pl. III. 5, 6) now in the Mainz Museum. In both these bowls, and also in that by BILICATVS (Pl. III. 4), the glaze lacks the mirror-like lustre of the typically South Gaulish fabric. Again, in some early fragments the glaze tends to become yellowish and readily worn (not, however, flaking off), whilst the paste is relatively soft and of a pale yellow tint, thus closely approximating to the technique of Arretine Sigillata of the Augustan period. Furthermore, a poor, dull purplish glaze is occasionally found associated with a comparatively soft fracture, as in some early fragments of Form 29 in the Colchester Museum (Pl. XXVI. 10; No. 1162.06, S[A]LV[E]TV) and in some fragments found at Hofheim I. (Ritterling, *Hofheim*, Pl. XXV. 7A, 7B).

Many of these peculiarities are also displayed in the plain wares of the potter ACVTVS, as found at Silchester (May, *Silchester*, pp. 199, 200).

The chief forms manufactured at La Graufesenque and other South Gaulish potteries were the following :

(a) *Decorated* : Dragendorff 11, 29, 30, 37 ; Knorr 78 and Déchelette 67.<sup>1</sup>

(b) *Plain* : Ritterling 1, 5, 8, 9, 12 and its late variant Curle 11 ; Dragendorff 24/25, 15/17, 16, 17, 18, 22, 23, 27, 33, 35, 36, 18/31.

These forms are specifically treated in a later section.

The decorative *motifs* which are particularly characteristic of South Gaulish Sigillata consist of :

(a) Continuous winding scrolls (Pl. III. 1-4, 7-9 ; Pl. IV. 5-7 ; Pl. VII. 1, 6, 7 ; Pl. VIII. 2-4 ; Pl. XIV. 1, 2, 4-7).

(b) Broad straight wreaths (Pl. III. 2, 5, 6).

(c) Narrow wreaths, both straight and winding (Pl. IV. 2 ; Pl. VIII. 2 ; Pl. XI. 2, 6).

(d) Festoons, both continuous and interrupted (Pl. IV. 2, 8, 9).

(e) Upright plant ornaments of the palmette type (Pl. III. 1, 5 ; Pl. VIII. 1).

(f) Panel or metope scheme of decoration (Pl. III. 9 ; Pls. IX. 4 ; XI. 1, etc.).

Broadly speaking, the designs on the earliest South Gaulish bowls are purely ornamental, and are composed chiefly of conventionalised plant forms (Pl. III. 4, 5, 6, 9), but, rarely, a naturalistic tendency is displayed, as in the upper friezes of Figs. 1 and 3, Pl. XXV. and the lower frieze of Fig. 8, Pl. III.

Not infrequently the design is an evident imitation of an earlier ornamental type. Thus the " Fern-frond " or " Nautilus " *motif* (Pl. III., 7) is an imitation of Arretine technique (Pl. II., 2), whilst the godroon or " elongated tongue " (Pl. III. 4 and 6, lower frieze) is derived from earlier metal work (Pl. XXVII. 8 ; Pl. XXII. 4, 5) or indirectly from Greek and other ceramics. Figure-subjects make their appearance at a comparatively early date, and are not infrequent in the reign of Claudius (Pl. III. 9 AQTANTVS) ; their incidence markedly increases in the Flavian period.<sup>2</sup>

For the most part the figures are placed in compartments or panels—the so-called " *metope* " type of decoration.

The compartments are demarcated by wavy lines or rows of beads.

Not uncommonly the figures occupy the centre of a small medallion, which usually, and more particularly in the earlier period, alternates with a diagonal or cruciform ornament (a " St. Andrew's Cross "), e.g. Pl. III. 9, and Pl. IV. 3.

<sup>1</sup> Déchelette (i. p. 152) ascribes this form to Lezoux. The decoration on many examples is, however, typically South Gaulish.




<sup>2</sup> For a more detailed account, see Chapter VI.





Figure-subjects arranged in compartments are largely in evidence in the latest examples which can be attributed to South Gaul, viz. those of the Flavian-Trajanic period,<sup>1</sup> e.g. on bowls by BIRACILLVS, CRVCVRO, MERCATOR, and L. COSIVS VIRILIS, and in the late work of the potter PAVLLVS (Pls. IX. 9; XVI. 1, 2, 3, 4; XIX. 3, 7; XX. 1; see also Knorr, *Rottweil*, 1907, XI. 1; XIV. 3, 7, 12; XV. 6, 7).

Another variation consists in the placing of the figure-subject, a man or animal, in the concavity of a winding scroll.

It is a comparatively rare circumstance for figures to be found "free" in the field, but they occur in this relation as early as the reign of Vespasian, e.g. the "free-style" friezes of GERMANVS (Pl. XI. 7) and that of MOMMO, from Pompeii (Atkinson, *Pompeii*, Fig. 15).<sup>2</sup>

The so-called "arrow-head" is a common ornamental type in the Flavian period. It occurs in rows, either filling up the space of a concavity of a winding scroll or as part of a metope scheme of decoration (Pl. IV. 2, 3, 4, 9 and 10). Another frequently recurring ornamental type is the godroon or "elongated tongue" with its modifications the , the oval  and the lozenge-shaped  ornaments.

The former is restricted to the lower frieze of Form 29, whilst its modifications usually occur as bordering-*motifs*, either above or below the decoration of the lower frieze (Pls. V. 1; VI. 5).

The elongated tongue is rarely found on Form 37, but the  and  ornaments are not infrequent (Pl. XI. 1, 6).

The designs utilised by the South Gaulish potters will receive special description and discussion in the sections dealing specifically with the various forms of decorated bowls.

With the exception of vessels of Form 37 with convivial or festive inscriptions from Banassac, it is a difficult task to separate the wares of

(A<sub>1</sub>) *Montans*, Tarn; and

(A<sub>2</sub>) *Banassac*, Lozère,

from the contemporary products of La Graufesenque. The discovery at Pompeii of a bowl with the convivial inscription BIBE AMICE DE MEO is clear evidence that the *officinæ* of Banassac were exporting their wares in the reign of Vespasian (see Pl. XIX. 4).

But if Déchelette was correct in ascribing the following potters to Montans (Déch., i. 136) and to Banassac (Déch., i. 118) respectively, it follows that the birth of these potteries, and more especially Montans, was not much later than that of La Graufesenque, and also that they were exporting ware at an early date. The appended tables demonstrate their early provenance and form-types (for explanation of abbreviations and site-values, see Chapters III. and IV.):

<sup>1</sup> There appears to be no evidence of the exportation of South Gaulish wares in the reign of Hadrian. <sup>2</sup> Further examples will be alluded to subsequently.

## MONTANS.

<i>Potters.</i>	<i>Forms.</i>	<i>Provenance.</i>
ACVTVS	Drag. 29, 27, 31; Ritt. 5, Drag. 24/25.	Sels (abandoned 41 A.D.), Montans (mould), Silchester, London, Pleshey (Essex).
CELER	Drag. 29, 27; Ritt. 5.	Sels, Hofheim I., Montans.
FELIX	Drag. 29, 37, 15/17, 24/25, 18, 18/31, 27, 33.	Sels, Xanten (Claudius-Nero), Hofheim, Novæsium (Le- gionary Camp), Wiesbaden old layer, La Graufesenque, Montans.
MATVGENVS	Drag. 29, 37, 17, 15/17, 27, 31; Ritt. 8.	Hofheim, Novæsium (Le- gionary Camp), Wiesbaden old layer, Montans (mould), Aislingen.
SALVE <sup>1</sup>	Drag. 29, 17, 15/17, 24/25,	Xanten (Claudius-Nero),
SALVETVS	27; Ritt. 8.	Mainz, Colchester, London,
SALVETV		Aislingen, Montans (frag-
SALVTV		ment with SALVE, mould
SALV		with SALVIVS).
OF SALVI		

## BANASSAC.

<i>Potters.</i>	<i>Forms.</i>	<i>Provenance.</i>
COMICATO	Drag. 27.	Sels, Hofheim I., Novæsium (Legionary Camp), Wies- baden old layer, Banassac.
NIGER	Drag. 29, 15, 18, 24/25, 27, 31, 33; Ritt. 8, 9.	Sels, Hofheim, Novæsium (Legionary Camp), Wies- baden old layer, La Grau- fesenque, Banassac.
PERRVS	Drag. 18, 24/25, 27.	Xanten (Claudius-Nero), Hof- heim, Novæsium (Legion- ary Camp), Wiesbaden old layer, Banassac.

(B) LEZOUX (*Ledosus*), near Clermont Ferrand, Puy de Dôme.

Although the pottery of Lezoux was probably in a state of activity as early as the reign of Claudius, it did not export its ware in any appreciable quantity until the commencement of the second century.

<sup>1</sup> Possibly a salutation which may have been used by more than one potter; more probably a "play" on the name of the potter SALVIVS.

Consequently, the relatively infrequent representation of this fabric—as compared with that of South Gaul—on early datable sites, such as those associated with frontier warfare, constitutes a serious difficulty in estimating the initial stages of its development. For convenience of reference Déchelette's three periods of activity have been adopted. It will, however, be shown that the dating of these periods is somewhat arbitrary, and that there was considerable overlapping in the activity of the potters assigned to distinctive epochs; consequently some modification in their grouping has been necessitated.

I. *The First Period*, 40-75 A.D. (Déch., i. 178).

Potters: ATEPOMARVS, COBNERTVS, DANOMARVS, ILLIOMARVS, PETRECVS.

All these potters made bowls, Form 29, with scroll or wreath decoration, which was sometimes combined with the "elongated tongue" ornament.<sup>1</sup>

As in the early period of South Gaul, the upper frieze is occasionally decorated with a broad straight wreath (Déch., i. Figs. 102, 103, 104) in substitution of the winding scroll.

The potter ATEPOMARVS, whose work is specifically characteristic of this period, employed delicately moulded and well finished designs. His glaze, like that of the earlier fabric of La Graufesenque, is dull and matt, lacking the typical South Gaulish lustre, and tends to a yellowish-red colour (orange-red according to Déchelette).

The provenance of these earlier wares is chiefly local, but one or two fragments of Form 29 in the Guildhall Museum are strongly suggestive of the work of ATEPOMARVS. His stamp also occurs at Silchester. (May, *Silchester*, No. C5.)

A typically pre-Flavian form, *i.e.* Ritterling Type 8, by the potter ILLIOMARVS, found at Ristissen, also indicates a certain degree of exportation even for the early plain wares of Lezoux.

The crater, Dragendorff Form 11, was also produced at Lezoux in the early period. It is evidently a copy of an Arretine prototype (Déch., i. pp. 149, 150, Fig. 99). Both in its technique and its decorative *motifs* it displays considerable affinity to contemporary St. Rémy fabric.

II. *The Second Period*, 75-110 A.D. (Déch., i. 178). The most representative potters of this period are BVTRIO and LIBERTVS.

Other potters whose working activity extended into or commenced in this epoch are: COBNERTVS, DAGOMARVS, ILLIOMARVS, IVLLINVS, PRIMVLVS, VERECVNDVS, CARANTINVS, DIVIXTVS, IVLLICVS, LAXTVCISSA and PVTRIV.

There is little difference between the technique of this pottery and that of the best period of La Graufesenque. The relief is well executed and the glaze is good, but it frequently lacks the typical cherry-red lustre of South Gaulish ware, and tends in many cases to a pale red tint.

<sup>1</sup> Good examples of this early Lezoux work are illustrated by Curle, *Terra Sigillata*, Fig. 17, Nos. 1-9.



The early vessel, Form 37, illustrated in Curle's paper on *Terra Sigillata* (*op. cit.* Fig. 20, and our Pl. XXIX. 9) demonstrates the close affinities of contemporary South and Central Gaulish decorative work. It probably belongs to the Nero-Vespasian period, and its ornamental *motifs* have evidently been derived from those of the MASCLVS school of South Gaul.

Two styles of decoration predominate :

(a) Metope or panel (Pls. VIII. 7 DIVIXTVS ; X. 6 COBNERTVS ; XX. 4 BVTRIO).

(b) Figures arranged free in the field (Pls. VIII. 5 BVTRIO ; XII. 2 BVTRIO ; XX. 5 Style of LIBERTVS ; XX. 6 LIBERTVS ; XXI. 5 LIBERTVS ; XXVI. 14 LIBERTVS).

The panels or compartments are demarcated by wavy lines (Pl. XX. 4 BVTRIO), as in South Gaulish ware, or, more commonly, by bead-rows (Déch., i. Pl. IX. 3), and sometimes by figures disposed as caryatides, as in a bowl by the potter DIVIXTVS, who began work late in this period (Pl. VIII. 7). As a rule the corner-tendrils, so common in the metope decoration of South Gaul, are absent. Continuous winding scrolls, god-rooms, and grouped "arrow-heads" are seldom met with. The cruciform pattern, so characteristic of South Gaulish ware of the Flavian period, is not infrequently represented (Déch., i. Figs. 110-119). Figure-subjects, however, predominate, and most of them are derived from classical prototypes. In fact, there is a far greater number of different types at Lezoux than at La Graufesenque, and LIBERTVS, more than any other Arvernian potter, was responsible for this sudden out-burst of new themes. His figure-subjects comprise 18 per cent. of the total number of Lezoux types (Déch., i. p. 186). The traditional influence of the two friezes of Form 29 is still in evidence in a number of bowls by the potter LIBERTVS (Pl. XXVI. 14 ; see also Déch., i. Nos. 39-42). A series of new forms of vessels came into being during this period and appear, in the main, to be restricted to it ; viz. Forms 64, 65, 66, 67, 68, 70 and 71.

They are all specifically Lezoux types, with the exception of Form 67, which was produced both in South and Central Gaul.

Forms 64, 65, 66 and 71 are stamped by LIBERTVS ; forms 64, 67 and 68 by BVTRIO.

It seems probable that the terminal date of this epoch, as given by Déchelette, is somewhat early, and that it should be extended into the reign of Hadrian.

The exportation of the products of this middle period of Lezoux was not inconsiderable, for decorated vessels of BVTRIO and LIBERTVS found their way both to Britain and to the Rhine district. The ware of the Lezoux potter COBNERTVS<sup>1</sup> is also found at Baden (Form 29), at Regensburg (Pl.

<sup>1</sup> Owing to the migration of this potter, it is sometimes difficult to distinguish his Central Gaulish from his East Gaulish products,

X. 6, Form 30) and Corbridge (*Arch. Æl.* Vol. VIII. Fig. 15, No. 1). The decoration of the two latter examples is that of the Trajan-Hadrianic period. An even earlier date may be assigned to the plain products of LIBERTVS, for his mark has been found on the early form Drag. 24/25 in King William Street, London, whilst the variant IBERTVS occurs twice in the Vespasian occupation of Hofheim, once on a Flavian example of Form 33 at Colchester, and once on an early example of Form 18 at Chester.<sup>1</sup>

Furthermore, a Flavian exportation is indicated by the occurrence of the stamps of the potters PRIMVLVS and VERECVNDVS in the second occupation of Hofheim, and those of DAGOMARVS and IVLLINVS in the early period of Newstead.

To about this date may also be attributed the ware of the potter ILLIOMARVS, as found at Colchester, Corbridge, London and Xanten.

The chief forms which were produced in this period comprise the following:

*Decorated* : Drag. 29, 30, 37, 29/37,<sup>2</sup> Déch. 64, 65, 66, 67, 68, 70, 71.

*Plain* : Drag. 18, 18/31, 27, 31, 33, 35, 36, and a late variant of 15/17 (IVLLINVS).

III. *The Third Period*, from 110 A.D. (Déch., i. 178). Commencing about the years 110/120 A.D., this period continued until the technique of moulded Sigillata was finally superseded at Lezoux by that of applied patterns, and it may be doubted whether moulded relief was produced at this centre in the third century.

In the second century, but more especially in the Antonine period, the exportation of Lezoux fabric attained its height.

It is found at that time not only in the Rhine provinces (where it had difficulty in competing with the East Gaulish industry), in the Netherlands and the outlying districts of Gaul, but also and more particularly in Britain. In fact, Britain may be regarded as the chief market for Lezoux ware at this epoch, *e.g.* at Newstead during the second occupation, when the decorated Sigillata is almost exclusively of Central Gaulish importation.

It is noteworthy that Lezoux wares only very rarely penetrated southwards into Italy. A decorated bowl of ALBVCIVS has, however, been found at Rome (Déch., i. 109), and another by PATERNVS at Turin. At this period pottery would seem to have been extensively supplanted in Italy, for domestic purposes, by silver and bronze. Similarly, even in Gallia Narbonensis the products of Lezoux are comparatively rare. Much of the Lezoux fabric of the earlier part of the second century possesses a fine glaze with well executed and designed ornament. On the other hand, although a fine glaze not infrequently persisted into the Antonine period (Curle, *Newstead*, p. 203),

<sup>1</sup> It is possible, however, that these early examples may emanate from the pottery of a LIBERTVS, who may have worked at La Graufesenque, for a bowl, Form 29, of South Gaulish character, stamped LIBERTVS, occurs

at Vechten (Knorr, *Terra Sigillata*, 1919, Pl. 44).

<sup>2</sup> To the "turn" of the first and second centuries belong the hybrid vessels, 29/37, illustrated in Déchelette, i. Figs. 101, 108.

the Sigillata of the middle and second half of the second century shows in a large proportion of examples a certain deterioration in quality whilst abundant in quantity—indicating not merely diminished artistic needs, but also an increasing disability to supply those needs.

In short, it furnishes a graphic illustration of the gradual barbarisation of the Empire. Whilst the glaze is still bright in some examples, as a rule it lacks the lustre of the earlier Sigillata, not uncommonly presenting a dull red surface, as in some bowls by the potters CINNAMVS and PATERNVS, who are representative of this period. Frequently, indeed, it is badly worn and has flaked off. These changes are too universal to be accounted for by varying provenance. A general coarsening in the designs and the material will also be noted.

Four types of decoration predominate :

(a) Metope or panel ornament, the panels being occupied by large medallions, demi-medallions and figure-subjects (Pl. VII. 3 ; Pl. XII. 4 CINNAMVS).

(b) Free-style ornament (Pl. XII. 1 PATERNVS).

(c) A repeated series of arcades, or of arcades combined with demi-medallions (Déch., i. Pl. X. 3 ; see also our Pl. XX. 7).

(d) A large continuous scroll, the interspaces of which are filled in with medallions or other designs (Pl. XII. 3 CINNAMVS).

In all cases, with the exception of type (d), figure-subjects, chiefly of a mythological origin, predominate.

In the neighbourhood of Lezoux kilns have been found at several centres, e.g. at Clermont Ferrand and at Martres de Veyre, where the paste and glaze are of a paler tint than at Lezoux.

At Lubié the pottery of Q. I. BALBINVS has been located, whilst branches of the firms of ADVOCISVS, BANVS, CINNAMVS, DOECCVS and LASTVCISSA have been discovered here.

Kilns have also been found at St. Bonnet, Iseure (Allier), with the stamps of AFRICANVS, CINTVSMVS, PVTRIV and SOLANVS.

At Vichy moulds of the Lezoux potters ADVOCISVS and IVSTVS have been found.

St. Rémy does not appear to have produced much Sigillata of the red-glazed type, but many vessels decorated with moulded relief are illustrated by Déchelette (*op. cit.* I. Figs. 34, 35, 42, 43, 50), and a good example of the decorated relief of this pottery is now in the Colchester Museum (Form 29).

The chief forms of the third period of Lezoux comprise :

(a) *Decorated* : Drag. 30, 37, and Déch. 68 (PATERNVS).

(b) *Plain* : Drag. 27, 31, 32, 33, 36, 38, 39, 40, 44, 45, 46, 49, 51 ; Walters 79, 80, 81, and Ludowici Tg.



*(C & D) EAST GAULISH AND TRANS-RHENISH POTTERIES.*

I. *Period.* The migration of the Sigillata industry from South and Central Gaul to East Gaul commenced in the last third of the first century, for even in the Flavian period potteries had commenced work at *Luxeuil*, where they persisted down to the end of the second century.

The rise of the East Gaulish *officinae* may therefore be stated to be coincident with the commencement of the decline of Rutenian manufacture and with the beginning of the period of greatest activity at *Lezoux*; and the East Gaulish products, especially in their earlier stages, show manifest traces both of South and of Central Gaulish influence.

Since the scientific investigation of East Gaulish Sigillata is to a great extent a matter of quite recent date, it has been deemed advisable to enter here somewhat fully into the question; and in dealing with each pottery centre, one or more of its potters are selected as type-studies.

Broadly speaking, the penetration of the Sigillata industry from South and Central Gaul into the East Gaulish provinces took place along the basins of the rivers Saône and Doubs (see Map). A critical examination of the work of the East Gaulish potters appears to warrant the surmise that this migration penetrated in two main streams:

(1) A line passing through *Luxeuil*, *Satto's* pottery, *Mandeure* and the potteries of *Vindonissa*, *Bregenz* and *Baden-in-Aargau* to *Heiligenberg*, *Ittenweiler* and *Rheinzabern* (with its offshoots of *Kräherwald* and *Western-dorf*);

(2) A line marked by the potteries of *La Madeleine*, *Lavoye*, *Les Allieux*, *Avocourt*, *Eschweilerhof*, *Trèves* and *Remagen*.

It must, however, be clearly understood that this penetration need not necessarily have occurred exactly in this geographical and chronological sequence; and the probability of considerable interaction or interinfluence between these two streams of migration must not be excluded. A typical instance of such interacting influence is seen in the case of *IANVS*, who worked not only at *Heiligenberg*, but also at *La Madeleine*. Again, *SATTO's* influence is distinctly in evidence as far north as *Lavoye* (*q.v.*).

Decorative types peculiar both to South and Central Gaul can be traced along each of these routes, but naturally the influence of South Gaul is most marked in the earlier potteries, such as *Luxeuil* and *Satto's* pottery, whilst at *La Madeleine* and *Lavoye* the dominance of *Lezoux* is chiefly noticeable. On the other hand, some Rutenian decorative elements are evident in the earlier work of the *Trèves* potters (Pl. XVIII. 1, Form 29/37), and may be due to some direct migration of South Gaulish potters.<sup>1</sup>

<sup>1</sup> A direct migration of a South Gaulish potter to a Trans-Rhenish pottery has indeed been demonstrated by Knorr (*Rottweil*, 1907, p. 31) in the case of *G'AMILVS*, who migrated

from *Banassac* to *Lehen*, near *Freiburg i. B.*, where he produced decorated bowls in the reign of *Domitian*.

Probably the earliest East Gaulish pottery, as already stated, was situated at *Luxeuil*.

The important pottery of SATTO, who seems to have migrated from La Graufesenque, existed in East Gaul at a locality as yet unknown.<sup>1</sup> But in view of his influence on other East Gaulish potters and the noticeably South Gaulish character of his earlier decorative designs, it is probable that he commenced work in the southern part of the East Gaulish area as early as 90 A.D.<sup>2</sup>

The potteries at Bregenz, Baden-in-Aargau and Vindonissa appear to have had only a short existence at the end of the first century and beginning of the second century.

Evidence as to the early date of activity of the kilns at *Heiligenberg* in Alsace (28 kilom. west of Strasbourg) is furnished by the presence of moulds of the bowl Form 78, which is characteristic of the Vespasian-Domitian period. In addition, the transitional bowl Form 29/37 was made at Heiligenberg (Pl. XII. 5)—a hybrid belonging typically to the Domitian-Trajan period. The year 95 A.D. may therefore be taken as an approximate date for the commencement of the Heiligenberg industry, and its most flourishing period would seem to have been the decade 110-120 A.D. The year 160 A.D. probably marks its end, for by this time all the potters had migrated to Rheinzabern or elsewhere.

In Trajan's reign a Sigillata centre flourished at *La Madeleine*, near Nancy. This was a particularly important site, for it was evidently the centre through which Central Gaulish influence on the Sigillata industry of East Gaul can be traced, diverging thence northwards to Trèves and ultimately to Remagen, and eastwards to Heiligenberg, Ittenweiler and Rheinzabern (see Map).

In the reign of Hadrian the more north-westerly potteries of *Lavoye* and its branches at *Les Allieux* and *Avocourt* became active, and seem to have derived much of their inspiration from La Madeleine.<sup>3</sup>

The Alsatian pottery of *Ittenweiler*, near Ehl (Helellum), flourished in the Trajan-Hadrian period. The earlier forms, 78 and 29/37, and even the cup 27, which all occur at Heiligenberg, are absent here, whilst Form 33, which was abundant at Heiligenberg, is only sparingly present.<sup>4</sup>

<sup>1</sup> The discovery of a mould by SATTO at Remagen does not invalidate this statement.

<sup>2</sup> Knorr (*Rottenburg*, p. 44) places his activity between 90 and 120 A.D., whilst Fölzer (p. 82) assigns a later date, viz. 110-150 A.D. Much of his work is of late first century and South Gaulish type; the commencement of his activity should therefore be ascribed, as Knorr suggests, to about 90 A.D.

<sup>3</sup> Probably the potteries of Lavoye commenced as early as the Domitian-Trajan

period; South Gaulish influence is evident in its earlier products as shown by the frequent occurrence of the wavy line (Fölzer 459, 460) and the multifid ovolo terminal (Fölzer 458).

<sup>4</sup> A Sigillata pottery has been assumed to exist at Jepsheim (between Colmar and Markolsheim) solely on the strength of a mould (stamped IVLIVSE), but IVLIVS was essentially a Rheinzabern potter. Still more doubtful is the existence of a pottery at Offemont.

At *Eschweilerhof*, between La Madeleine and Trèves, the potters of the AVIRVS group flourished in the Antonine period. At *Blickweiler* in the Palatinate a Sigillata pottery was active in Hadrian's reign.

The extensive pottery of *Rheinzabern* (*Tabernae Rhenanae*) obtained its earlier potters by a migration from Heiligenberg and Ittenweiler. A large number of moulds of Form 37 has been obtained by Ludowici's excavations,<sup>1</sup> and by means of this evidence an attempt has been made by Reubel<sup>2</sup> to assign exact dates to the potters, with perhaps a greater assumption of accuracy than is warranted by the facts. We have therefore considered it advisable to revise his work and to simplify his determinations by arranging the potters in three periods (*v. infra*). The earliest potters which he has been able to allocate to Rheinzabern are IANVS and REGINVS, who presumably commenced operations on this site about 120 A.D.; whilst IVLIVS was perhaps the latest potter of moulded ware, working down to the end of the second century, and turning out wares so execrably bad in design and execution as to be sufficient in itself to discourage any further demand for moulded Sigillata. Barbotine Sigillata took its place to a great extent, but this entire class is unfortunately unstamped. Finally, only plain ware continued to be produced at Rheinzabern, but probably not far into the third century.

In the second half of the second century branches of the Rheinzabern potteries were established in an easterly direction at *Kräherwald* in Württemberg and *Westerndorf* in Bavaria, the most eastern outpost of the Sigillata industry.

The Sigillata pottery of *Trèves* was active from the reign of Hadrian down to about the middle of the third century, but it probably commenced work as early as the reign of Trajan, for it produced the hybrid form 29/37 (Pl. XVIII. 1). In the late second century and early third century it competed so successfully with the Rheinzabern pottery that at Niederbieber (190-260 A.D.) the Rheinzabern Sigillata occupies quite a subordinate position both in quantity and variety.

The northern potteries of *Remagen* and *Sinzig*<sup>3</sup> are off-shoots from this centre, without however supplanting the activity of Trèves. *Heddernheim*<sup>4</sup> may also have owed its development to the same source. At *Remagen* an early Roman kiln with ordinary pottery was discovered, but the Sigillata kiln found here only dates to the end of the second and beginning of the third century (Behn, *Röm. Keramik*, p. 262).

II. *Sources of inspiration and special characteristics of the East Gaulish potters.* There is abundant evidence of the influence of the South Gaulish

<sup>1</sup> Ludowici, W., *Stempelnamen & Stempelbilder römischer Töpfer in Rheinzabern*, 1901-1905, 2 vols.; *Urnengraber röm. Töpfer in Rheinzabern*, 1905-1908; *Röm. Ziegelgräber in Rheinzabern*, 1908-1912.

<sup>2</sup> Reubel, G., *Römische Töpfer in Rheinzabern*, Speier, 1912.

<sup>3</sup> For examples of Sinzig ware, see Curle, *Terra Sigillata*, Figs. 35, 36.

<sup>4</sup> Behn has written about the Sigillata pottery of *Heddernheim* in *Röm.-germ. Corresp. blatt.*, II. (1909), p. 74; he assigns it to the Domitian-Hadrian period.



*officinac* in the work of the earlier potters of East Gaul, such as those of the first period of Luxeuil, the wares of SATTO and SATVRNINVS, and of the "potter of the small medallion" at Heiligenberg.


(a) At *Luxeuil* the influence of La Graufesenque is particularly noticeable in the fabric of the "potter of the helmets and shields," whose work is thus characterised on account of the so-called "helmets" and "shields" scattered in the field. He used a fine ovolo with a rosette-terminal (Pl. XVII. 1). Although his figure-types seem to have been derived from both South and Central Gaul, his ornamental *motifs* are distinctly South Gaulish in origin.

In the early products of Luxeuil the following common South Gaulish ornaments occur :

The St. Andrew's Cross with corner-tendrils (Fölzer, Pl. I. 3, 11), the winding scroll with the cuneiform spurred leaf (Fölzer, Pl. I. 9), arrowheads with oblique wavy lines (Fölzer, Pl. I. 10), and the frequent delimitation of the designs from each other and from the ovolo by wavy lines (Fölzer, Pl. I. 3, 6-11).

A mould, attributed (on the score of its style and details of decoration) to the Domitian-Trajan potter RANTO, has been found at Luxeuil and would appear to identify this site as his working centre (Fölzer, Pl. I. 1). A ribbed cornucopia is highly characteristic of his designs and occurs on his bowls of Form 29 (Heddernheim, in Frankfurt Museum ; see our Pl. XXVIII. 12), 78 and 37.

(b) SATTO and SATVRNINVS. The effect of Rutenian influence on an East Gaulish potter is nowhere more strongly exemplified than in the case of the interesting and versatile potter SATTO, whose name indeed occurs at La Graufesenque. In the latter locality, however, only plain wares (*e.g.* Form 27) are known to bear his stamp, which in all cases has the first T ligatured (OF SĀTO, OF SĀTON). On all his decorated and East Gaulish fabric, however, there is no ligature, *e.g.* SATTO FECIT.

This difference is to be accounted for by a change of stamp rather than by attributing the wares to two different potters. Thus, in the case of MOMMO, we find the earlier wares are stamped , whereas his later fabric bears a variable signature, such as OF MOM, MOMMONIS, *etc.*

Furthermore, in a grave at Rheinzabern a decorated bowl with the ordinary SATTO stamp has been found with a lamp bearing the ligatured SĀTO stamp of La Graufesenque.

Rutenian influence on the work of this potter is evidenced by the fact that he made Form 29 and by his frequent use of the transitional scheme of decoration (Pl. XVII. 4), continuous scrolls (Pl. XX. 3), festoons (Pl. XVII. 4), the St. Andrew's Cross with corner-tendrils (Fölzer, Pl. IV. 8), grass-tufts, *etc.*, and in general by a preference for plants, animals and landscapes in his designs, with only a relatively restricted use of the human figure.

The style of his work shows a near affinity to that of such South Gaulish potters as GERMANVS and BIRACILLVS, and his transitional free-style bowl (Pl. XVII. 4) may be compared with those of GERMANVS (Pl. XI. 7) and BIRACILLVS (Pl. XIX. 5) for evidence of the continuity of inspiration. In all these cases we find an upper frieze or zone decorated in free-style, whilst the lower frieze is ornamented with festoons.

Amongst his figure-types some owe their source to South Gaul, *e.g.* Hercules and the Lion (Déch. 466), pugilists (Déch. 648, 649), a siren, a butcher (cf. Déch. 560, with Fölzer 138), etc. He, however, exhibits unmistakable signs of Arvernian traditions in his adoption of such mythological subjects as Prometheus and the Eagle, Ulysses and Polyphemus, Actaeon, and pigmies fighting cranes.

But he resembled his forerunner GERMANVS and the partly contemporary potter LIBERTVS in not resting content with slavish imitations of antecedent Sigillata decoration. His vivacious scene of cupids at the vintage (Pl. XVII. 4) was probably inspired by a sarcophagus on the Esquiline Hill, as Fölzer points out. A somewhat similar scene occurs on a sarcophagus at Arles (Pl. XXXV. 1).

The style of SATVRNINVS<sup>1</sup> so closely resembles that of SATTO that it is highly probable that both these potters worked together, if indeed they were not of the same family. Thus both of them depict the same vintage scenes, and the stamp SATTO FE occurs on the rim of a bowl, Form 37, stamped SATVRN FECIT among the decoration.<sup>2</sup> (See also Knorr, *Rottweil*, 1907, Pl. XVII. 22, SATVRN[ amongst and SATTO FE beneath the decoration).

(c) At the potteries of *La Madeleine* (near Nancy), where many moulds have been found, some influence of South Gaulish traditions can be traced in the work of ALBILLVS, *e.g.* in his frequent use of transitional or zonal decoration (Pl. XVII. 2), finely branched trees and grass-tufts.<sup>3</sup>

He evinced a strong predilection for spirals, spiral tendrils, festoons and the tripod ornament (kettle-drum). Most of his figure-types, however, were derived from Lezoux. His stamps also occur at Vichy and Lubié in the variants ALLBILLI FECI and ALLBILLI FEC, and perhaps these occurrences are an indication of his initial period of activity.

The technique of ALBILLVS was somewhat coarse, and his glaze is a dull brick-red without gloss or lustre.

The substitution of the Greek cross in repeated series for the usual ovolo *motif* is not uncommon in his work (Fölzer, Pl. II. 29).

IANVS also worked at La Madeleine, where some of his moulds have been found. His early work shows considerable affinity to late South

<sup>1</sup> He is to be distinguished from SATVRNINVS of Lezoux who worked in the Antonine period (Déch., i. 298; Pudding Pan Rock).

<sup>2</sup> SATTO would appear to be the diminutive of SATVRNINVS. Analogous diminutives may be cited, *e.g.* SECCO from SECVNDVS, CRIPPO

from CRISPINVS, MATTO from MATERNINVS, PATTO from PATERNVS or PATERNINVS, ATTO from AVITVS, and many others.

<sup>3</sup> See also Curle, *Terra Sigillata*, Fig. 27, decorated bowl by ALBILLVS.

Gaulish technique (see Knorr, *Rottenburg*, Pl. XI. 1; Bushe-Fox, *Arch.*, 64, Fig. 21). Furthermore, a bowl of his (Pl. XIII. 2), found at Unterweissach, possesses many decorative elements reminiscent of South Gaulish ware, and it is not impossible that he was in some way connected with the potter IANVARIS of La Graufesenque (Déchelette, i. 83) and Lezoux.<sup>1</sup>

(d) *Lavoye* (Meuse dep.), with branches at *Les Allieux* and *Avocourt*.

Down to 1911 as many as 600-700 moulds and 50 kilns had been discovered at Lavoye by Meunier.<sup>2</sup> Generally speaking, these potteries must be regarded as offshoots from La Madeleine, and the number of figure-types employed is restricted and monotonous. The influence of SATTO, however, is evidenced by the use of his Pan, cupids and sitting children.

Amongst the potters who worked at this centre may be mentioned AMENVS, GERMANVS, GESATVS, IVSTVS, TOCCIUS, and TRIBVNVS. The earliest potters, e.g. TRIBVNVS, produced ware of good glaze and decoration of some artistic merit (Pl. XVII. 5). In the decorative fabric of TRIBVNVS South Gaulish influence is evidenced by the wavy line separating the ovolo from the design (Pl. XVII. 5), and by the transitional or zonal scheme of decoration on two of his moulds (Fölzer, Pl. VII. 11, 16).

(e) *Swiss centres of Sigillata potteries*. So little as yet has been published on the occurrence of the Sigillata industry in Swiss territory that a passing reference will be sufficient.

At *Bregenz* (which belongs to this regional group although not actually in Switzerland) more than a dozen cylindrical supports (*Knollenständer*) for vessels during firing have been found as well as two moulds of Form 37 (Behn, *Röm. Keramik*, p. 261). One of the moulds and several bowls bear the stamp of CERALIS, who apparently worked here at the end of the first century previously to his activity at Heiligenberg (Forrer, Fig. 97, and p. 184; Knorr, *Cannstatt*, p. 33).

At *Baden-in-Aargau* wasters have been found in kilns of decorated bowls (Form 37) with the stamp REGINVS FEC (Forrer, *op. cit.* p. 173, and see Barthel, O.R.L. 59 Cannstatt, p. 47).

At *Vindonissa* (Windisch) less direct evidence is available, but decorated ware seems to have been made extensively here,<sup>3</sup> e.g. by VERECVNDVS (down to the abandonment of the fort by the XI. legion in 102 A.D.), and prior to his activity at Heiligenberg. The site is regarded by Behn (*Röm. Keramik*, p. 263) as the centre for the Sigillata industry in Switzerland, and the

<sup>1</sup> Whilst Forrer regards the S of IANVS as being ligatured with the F in the stamp IANVF, Fölzer considers IANV to be merely an abbreviation of IANVARIS.

<sup>2</sup> *L'établissement céramique de Lavoye*, 1905, 1908.

<sup>3</sup> Frölich, *Anzeig. f. schweiz. Altertumskde.*, N.F. IX. (1907), p. 35; Steiner, *Corresp. bl. d. Gesamtver.*, LVIII. (1910), p. 467; and Forrer, *Heiligenberg*, p. 135.



following potters are said to have worked here : APIRILIS, CINTVGNATVS, MERCATOR, MONTANVS, PATRICIVS, PAVLLINVS, REGINVS, RVFINVS, SECVNDINVS, SILVINVS and VIRILIS (Forrer, *op. cit.* p. 139).

(f) The potters of *Heiligenberg* can be divided into two periods. To the earlier period (Domitian-Trajan) can be assigned the work of IVLIVS RESPECTVS (with the stamp OFF IVL RESPECTI MED), VERECVNDVS, IANVS, the "potter of the small medallion," and perhaps CIRIVNA (CIRIVNAF mould, Form 37).

The characteristic style of IANVS is recognisable on a very great number of bowls (Form 37) in addition to many signed IANVF (as at La Madeleine, *v. supra*).

He had a marked predilection for geometrical motives, *e.g.* spirals, circles, and even used a kind of arrowhead for an ovolo border. His network and rosette decoration was peculiar to his activity at Heiligenberg. His style is not only visible on a mould of Form 78, but on the hybrid form 29/37. (Forrer, Pl. XXX. 8A, and Fig. 56). He still makes use of a simplified St. Andrew's Cross as well as the zoned (transitional) type of decoration.

The "potter of the small medallion," on whose work a large F is sometimes found (the F-potter of Forrer) was active at an equally early date. His work (confined to Heiligenberg) displays even stronger South Gaulish influence than that of IANVS, and depicts similar subjects to those of SATTO, *e.g.* vintage and Bacchanalian scenes. He also made the early bowl, Form 78, and the hybrid form 29/37 (Pl. XII. 5). A small medallion of beads enclosing Lilliputian figures (cupids, etc.) is particularly characteristic of his work. One bowl in his style bears the inscription FERBIBE (Forrer, Pl. XXXIII. 3-10), recalling the motto-bowls of Banassac.

CIRIVNA borrowed many of his types from Lezoux and Mandeure. His work is careful, artistic and well-balanced, and he had a predilection for medallions or demi-medallions with a "milled" border (Pl. XIII. 1). This potter's activity probably lasted into the Hadrian-Antonine period.

The second period at Heiligenberg commences with the work of REGINVS, whose stamp occurs on moulds and bowls of Form 37. His stamps occur at Mandeure and Luxeuil as well as on wasters at Baden-in-Aargau (*v. supra*), and the hybrid form 29/37 in his style was found at Heiligenberg.

CERIALIS, FIRMVS and GEMELLVS also made decorated bowls in the later period of Heiligenberg.

The presence of the following stamps on claystands (*Knollenständer*), used for supporting plates, cups, etc., in the kilns, furnishes clear proof of the activity at Heiligenberg of the following potters of plain ware : CARISIVS F, CONSTAS F, CRISTO, DOMITIANVS, DRONBVS, FIRMVS, GEMINIVS, IBILIRI, OCCISO F, OCIOSO, RVFINI FAT, SACCO FEC, SACRATVS F, SOLLEMNI, VACCVL F, VALENTINVS, VICCIVS, VERECVNDVS F.

Among the plain forms known to have been made in Heiligenberg, the following have been specified :

Platters : Forms 18, 31, 32, Ludowici Tk.

Dishes or bowls : Forms 35, 36, 40, 44, 51 (Ludowici Tz).

Cups : Forms 27, 33, 46, and the rims of two ovate beaker-urns.

Sigillata vessels decorated with rouletting (deeply notched in most examples) were plentifully manufactured at this centre. Forms 30, 37, 31/37 and 30/33 were produced in this technique (Pls. LXXV. and LXXVI.).

(g) At *Ittenweiler* decorated ware was made more abundantly than plain forms, but the following shapes of the latter have been recorded, viz. Forms 18, 18/31, 32, 51 (Ludowici Tz more frequently than at Heiligenberg), Ludowici Tk, 33 and 38. In contrast to Heiligenberg the cup Form 33 is only sparingly present.

CIBISVS was the most important potter at Ittenweiler, and his activities were confined to this locality. He appears to have made use of an ovolo belonging to VERECVNDVS before adopting his characteristic triangular and striated ovolo (Pl. XIII. 5). VERECVNDVS also worked here, and, according to Forrer, made more decorated ware than during his stay at Heiligenberg. It is important to note that an example of Form 30 in the style of VERECVNDVS was found at Ittenweiler (Forrer, *op. cit.* Fig. 118H), whilst this form is absent at Heiligenberg.

(h) At *Blickweiler* in the Palatinate a Sigillata pottery was excavated in 1913 (*Röm.-Germ. Korresp. Blatt*, 1913, 5), and according to Atkinson (*Lowbury Hill*, p. 58) the major part of the presumably Central Gaulish Sigillata found on the German *Limes* was derived from this pottery and not from Lezoux. The following pieces, figured by Knorr from Cannstatt (his Pls. IV. ; V. 3, 4, 7, 8 ; VI. 1-5 ; XV. 1-4, 6 ; XVI. 6 ; XVII. 1), are now ascribed to Blickweiler ; and the potter, who used the monogram  $\sigma\delta$  of DOECCVS (but on a smaller scale than the Lezoux potter, and in frequent repetition instead of singly), evidently worked at this locality. This pottery would seem to have had its activity restricted to Hadrian's reign, and its products do not occur in the Outer Limes (140/150-260 A.D.).

(i) *Eschweilerhof*, near St. Ingbert. The AVITVS group of potters (AVITVS, L.A.A., L.A.L.) worked at this centre. They showed a predilection for free style, and most of their figure-types were derived from Lezoux. A distinguishing feature of their decorated bowls is the character of the tongue of the ovolo. The vertical element is " beaded," whilst the terminal forms an irregularly cruciform ornament (Pl. XVII. 7).

Here AVITVS always signed his bowls AVITI F, thus differing from the AVITVS of La Graufesenque (AVITI O, Walters, *C.R.P.* M6, Form 29, Torre

Annunziata), of Lezoux (AVITI·M, AVITI), Moulins (AVITVS), or of Rheinzabern and Ittenweiler (AVITVS, AVITVS FECIT, FEC, FE and F).<sup>1</sup>

The potter CAMBO has close affinities to the AVITVS group. His stamp is always accompanied by a phallus, and his ovolo, in which every alternate tassel is missing (Fölzer, Fig. 335), is a characteristic one, only shared by SECVNDINVS, AVITI and CERALIS. The variant CAMBVS F is found at Vichy and other localities in Central Gaul.

(j) *Rheinzabern* (with *Kräherwald* and *Westerndorf*). As already stated, the potters of Rheinzabern can be conveniently classified in three periods, and if we take Reubel's determination (based on the evidence of graves and associated coins as well as on a critical examination of type-figures), we find that the majority are confined to the second half of the second century. In the following list only the makers of decorated wares are mentioned. Those underlined had already worked at Heiligenberg :

First Period, 120-140 A.D. : IANVS, REGINVS.

Second Period, 130-170 A.D. : CERALIS, BELSVS, B. F. ATTO, PERGRINVS, COBNERTVS, LVTAEVVS, MARCELLVS, CASTVS, MAMMIANVS, RESPECTINVS, VICTORINVS, FIRMVS, IVVENIS, RESPECTVS, VERECVNDVS, PERVINCVS, RESVLINVS.

Third Period, 160-200 A.D. : COMITALIS (with IOVENTVS and LATINVS), PVPVS, ARVERNIVS, ATTILLVS, AVGVSTINVS, PRIMITI(v)VS, LVPVS, PERPETVS, STATVTVS, SECVNDINAVI, VICTOR, IVLIVS.

Although IANVS was the earliest of the Heiligenberg potters to migrate to Rheinzabern, a difference in his style is noticeable in the circumstance that his network and rosette decoration, so frequent at Heiligenberg, does not occur at Rheinzabern (Reubel, *op. cit.* p. 36).

An example of Form 37 by REGINVS which was probably made at Rheinzabern is figured by us to indicate his style (Pl. XII. 6 ; see also Knorr, *Cannstatt*, Pl. XXXV. 2, 5, 8, 9).

In the Second Period the Heiligenberg potters, CERALIS and BELSVS, developed a greater activity at Rheinzabern (Knorr, *Rottenburg*, Pl. XVII. 1 CERALIS F, 6 CERALIS, 3 CERALIS CONSTAENI ; Pl. XVIII. 7 and 8, BELSVS F ; Walters, *C.R.P.* Pl. XIII. CERALIS).

The bowls stamped B. F. ATTONI are also highly characteristic of this period at Rheinzabern (Pl. XIII. 6).

The work of COBNERTVS is to be distinguished from the COBNERTVS of Lezoux, *e.g.* the Form 30 by COBNERTVS from Regensburg (Pl. X. 6) evidently proceeded from Lezoux and not from Rheinzabern (see also Déch., i. No. 54, Form 29).

<sup>1</sup> The stamp of AVITVS occurs seven times at Newstead II. None of them, however, appears to belong to this group.



The Third Period was, however, that of greatest activity, for COMITALIS alone produced the larger amount of decorated Sigillata at Rheinzabern, e.g. over 200 of his bowls were found at Zugmantel. He showed a great preference for types of men and animals, whilst plant-forms occupy quite a subordinate position in his designs (see Knorr, *Cannstatt*, Pl. XXV. 1-3). Two examples of Form 30 by COMITALIS are known (Rheinzabern and Vienna), and one by PRIMITIVS.

IVLIVS was one of the last of the Rheinzabern potters to make decorated moulded Sigillata ware, and (as mentioned above) his work reached the lowest depths of degeneration, both in style and workmanship. He occasionally ornamented the plain rim of his hemispherical bowls *en barbotine* (Pl. XXIX. 10).

The plain forms manufactured at Rheinzabern were extremely varied, and are described under the various headings. It may, however, be mentioned that Form 32 was more abundantly produced than any other form.

*Kräherwald*,<sup>1</sup> near Stuttgart, was a branch of Rheinzabern, and several Rheinzabern potters produced their wares here in the second half of the second century, e.g. REGINVS and COMITALIS. Several stamped clay-supports have been found here. The most frequent stamps are those of DOMITIANVS, MARINVS, REGINVS and CAMVLATVS.

*Westerndorf*<sup>2</sup> was also a branch of the Rheinzabern industry, and most of its potters, such as COMITALIS, were at work either previously or contemporaneously in the parent-locality. A peculiarity of some of the Westerndorf stamps is the presence of the letters CSS preceding the name of the potter, e.g. CSS MAIANVS, CSS VOLOGESVS F, CSS ER, etc.

An example of Form 30 has been recorded from Westerndorf (Pl. VIII. 8), and is probably the latest bowl known of this shape.

The occurrence of figures in arcades was a frequent characteristic in the decoration of Form 37, and appears to have been influenced by the frequency of arcades in the sarcophagi of the Antonine period.

(k) *Trèves*. The Sigillata potters of Trèves can be divided into three natural groups, of which only the second evinces any evidence of originality of treatment and design.

Owing to the special nature of the clay used in the potteries of Trèves, the Sigillata made at this centre can readily be distinguished. It is yellow-brown in fracture, is baked very hard, and in particular it is penetrated by tiny quartz-granules, which have frequently jumped out from the surface when burnt in the kiln, thus causing a finely pitted appearance. During the best period the glaze is still adherent, and is dark-red to orange-red in colour with a matt lustre. Subsequently the glaze was a cherry-brown or even chocolate colour, easily flaking off.

<sup>1</sup> Knorr, *Cannstatt*, p. 41.

<sup>2</sup> Hefner, *Oberbayr. Archiv*, XXII. (1863),

p. 1; and Knorr, *Fundber. aus Schwaben*, XIV. (1906), p. 73.

The technique in the best period approached that of Lezoux, but steadily degenerated.

(i) The *first group* of Trèves potters form a natural division, even although they are not stamped. Their work reveals a close connection with the potters of La Madeleine, as well as more distant affinities with the work of SATTO and the potters of Vichy. Thus they follow ALBILLVS of La Madeleine in frequently using the Greek cross in place of either the usual ovolo or of the basal wreath (Fölzer 960), or an aberrant ovolo recalling that of LIBERTVS (Pl. XVII. 8). They resemble the Vichy school in the employment of the hooked spiral in series (Fölzer 887), and a continuous scroll composed of spirals and buds (Pl. XVII. 9).

The influence of South Gaul is evidenced by the frequent use of the basal wreath (Pl. XVII. 8), and such figure-types as Diana and the small hind (Déchelette 63A). It is also well marked in the bowl Form 29/37 (Pl. XVIII. 1), where the transitional scheme of decoration and many of the detail elements, such as the cuneiform spurred leaf, the basal wreath and the figure playing the double flute, are demonstrably of Rutenian origin.

The influence of Central Gaul is also present, and it is interesting to note the occasional occurrence on the same bowl of both Rutenian (Diana and the small hind) and Arvernian types (Diana and the large hind) (Pl. XVII. 8).

Aberrant ovolos in the form of the Greek cross, circles and spirals are not uncommon. Occasionally the ovolo is furnished with a double tassel, the margins of which are serrated (Fölzer 936). Not infrequently the bowl is furnished with a series of grooves immediately above the ovolo (Pl. XVII. 8)—a characteristic also met with at Heiligenberg (Pl. XII. 5).

(ii) The *second group* comprises DEXTER and CENSOR with their disciples and imitators. Here we find a renaissance period, so to speak, of the decorative art of Terra Sigillata, comparable to the influence of GERMANVS at La Graufesenque and LIBERTVS at Lezoux.

There is, however, a general degeneration in technique, even as compared with that of the first group of Trèves potters, as shown by the higher rims, thicker walls and unequal or spotted glaze of the vessels.

Whilst some of the designs which occur on the bowls of CENSOR and DEXTER (Pl. XVIII. 2, 3), such as the dolphin encircling a trident<sup>1</sup> (see Déchelette 1060) and the "bead and reel" (astragalus) *motif* used for demarcating the design (see Pl. XIV. 8 Margidunum), were inspired by Lezoux, they did not, in the main, rely upon a slavish imitation of Rutenian and Arvernian types and designs, but sought elsewhere for fresh sources of inspiration.

In the decorated work of DEXTER we note a recoil from current conventional designs, and an honest endeavour to return to the naturalism of

<sup>1</sup> This *motif* occurs on a fresco at Pompeii.



the Augustan age. Thus his garlands (Pl. XVIII. 3) recall those of the Arretine potter CORNELIVS (Pl. XXIV. 1). According to Fölzer he copied many of his designs from Alexandrian fish bowls of beaten silver, his garlands and his urns from Imperial metal vases, and his busts of deities from Celtic forms, such as the silver cauldron of Gundestrup or the "war-gods" of Bavay. The use of the ovolo with little urns is characteristic of DEXTER and probably peculiar to him, but he employed at least two ovolo stamps, and sometimes surmounted his designs with the normal ovolo-*motif* (Fölzer, Pl. XV. 7. stamped bowl). Classical mythology appears to be absent from his work.

CENSOR, whose moulds have been found at the Trèves potteries, employed a number of new types, which, according to Fölzer, were derived from metal vases, whilst his figures of the Iphigenia legend were taken (probably indirectly) from representations on sarcophagi which are still extant at Munich, Weimar and the Villa Albani.

Quite characteristic of CENSOR is a semicircular, brooch-like design (Fölzer, Pl. XVI. 2, 8, 10-12).

Minor potters of this group were CRICIRO<sup>1</sup> (Pl. XVIII. 7), CATV . . . (who also made use of the Iphigenia cycle), BOT . . . , MELVS,<sup>1</sup> MAIIAAVS, TORDILO (Pl. XVIII. 4) and AMATOR.

(iii) In the *third group* of Trèves potters only one name is known, viz. ALPINVS, possibly the same potter as Q. ALPINVS, who made plain wares at Trèves.

The basis for identification is a fragment of a 37 bowl at Dalheim with the stamp ALPINI FORM (Pl. XVIII. 5). A large number of bowls have been ascribed to this group by Fölzer (see Pls. XX., XXI.) and by Oelmann (*Niederbieber*, Pl. VII.). Our figure 6, Pl. XVIII., will give an idea of the general degenerate type of decoration, which, in the main, consists of a confused free style interspersed occasionally with arcading or other separating ornament. The decoration is frequently bordered below by a two-leaved wreath reminiscent of South Gaul, whilst occasionally figure-types occur recognisable as being derived from Lezoux (Pl. XVIII. 5, Actaeon).

In general, the ovolo in this group lacks the tongue or tassel.

In the final stage of the Sigillata industry at Trèves the technique is very coarse, there is a complete lack of lustre and the colour is dark-red to chocolate-brown. Our two illustrations (Pl. XVIII. 8, 9) depict the style of some of the final products of this pottery. In the first case an upright, double chevron takes the place of the ovolo, and in the second the circular ornament appears to be the forerunner of the impressed "daisy" pattern occurring on such late sites as Pevensey.

Many examples of the later products of the Trèves pottery are illustrated in Oelmann's *Niederbieber* (Pl. VII. ALPINVS, etc.; Pl. VIII. 1-23, MAIIAAVS, etc.).

<sup>1</sup> Not to be confused with the South Gaulish potter of the same name.



III. *Area of Distribution of East Gaulish Ware*.—The area of distribution of East Gaulish Sigillata lay almost exclusively along the northern frontiers of the empire, viz. the regions of the Danube and the Rhine, Gallia Belgica and Britain.


In the Rhenish and Danubian provinces this fabric supplanted to a great extent the second century products of Lezoux, whilst in Britain it competed with Central Gaulish Sigillata with a considerable degree of success. On the other hand, very little of it penetrated into Central and South Gaul.

The importation of this ware into Britain commenced about the "turn" of the first and second centuries, or, at latest, early in the second century. The fragments of the hybrid form 29/37 found at Corbridge and Nether Denton are of this period. To about the same date we can ascribe many sherds of relief ware of Luxeuil type found in London, *e.g.* Walters, *C.R.P.* M 1067, M 1102 style of RANTO, M 1141, M 1206, M 1274, M 1334, M 1441, M 1514.

This importation into Britain continued throughout the second century into the early part of the third century, and the decorated wares of all the chief East Gaulish centres are represented (see Walters, *C.R.P.* M 2251-2299, mostly Rheinzabern ware; M 1200 the early period of the Trèves potteries). Amongst the latest of the East Gaulish imports we may note the work of the Trèves potters CENSOR (Walters, *C.R.P.* M 2279, M 1246), CRICIRO (May, *Silchester*, Pl. XXVII. 84), and TORDILO (London, G.H.).

Decorated Sigillata, stamped with the names of the following East Gaulish potters, has been found in Britain. The list could be considerably extended if unstamped specimens characteristic of the style of certain potters were included, *e.g.* SATTO, IANVS, CENSOR, etc.

*Luxeuil type*: IOENALIS F Colchester.

*La Madeleine and Heiligenberg*: IANV  London (B.M.),<sup>1</sup>  
York, Nether Denton, Corbridge.

*Ittenweiler*: CINTVSMVS F Corbridge.

*Rheinzabern*: B F ATTONI York, Corbridge.

AVITVS FE London (G.H.).

CERIALIS London, York, Corbridge.

COMITIALIS FE London (B.M.), York.

COMITIALIS F London (B.M.), York.

COMITIAL London (B.M.).

CONSTANS London (B.M.).

FIRMI London (B.M.).

FLORENTINVS F Silchester.

IVLIANVS London (G.H.).

<sup>1</sup> In the case of London the abbreviations B.M., G.H., G.P.O., B.G. and K.W.S. stand for British Museum, Guildhall, General Post Office, Bethnal Green and King William Street respectively.

*Rheinzabern—continued :*

IVLIVS York, Corbridge.  
 LVTAEVVS F London, Corbridge.  
 LVTAIVS F London.  
 MAMMILIANVS London (G.P.O.), Corbridge, Carlisle.  
 PERPET London (G.H.).  
 REGINVS F London (G.H.), Corbridge.  
 REGIN F Crocolana.  
 REP Chesterford.  
 VERVS F Colchester.

*Eschweilerhof :* L.A.L. (Avitus group) York.

*Trèves :* [CENS]OR London (B.M.).

CRICIRO Silchester, Arlesey. TORDILO London (G.H.).

*Westerndorf :* CSS EROT Liverpool, York.

In the case of the plain forms of Sigillata, stamped specimens in Britain are more frequent. The actual stamp is given, and in each instance this is only characteristic of the particular East Gaulish pottery, so that special care has thus been taken to avoid incorporating any South or Central Gaulish stamps of the same name (*e.g.* IVCVNDVS, PATERNVS, etc.). Further, where the difficulties in distinguishing the stamps of certain potters appear to be insurmountable, they have been omitted, as *e.g.* MARTIALIS. A dash (—) signifies that the form of the vessel has not been recorded.

*Luxeuil :* AGEDILLVS F 27 London (B.M.). AGEEDILLVS F — London.  
 AGEDILLI O 27 London (G.H.). AGEDILLI 45 or 81 London  
 (B.M.). AGEDILLVS 18 Corbridge. AGEDILICI SE (?)—  
 London (B.M.).

BRITANN II — London.

IOENALIS F 27 London (G.H.), Wroxeter, Holt. 18/31 Cirencester.

OF MARO — Colchester. MARONI M — Colchester.

MVSICI M 33 Corbridge: 38 London (G.H.): — Cirencester.

OF RANTO — Cirencester.

*Lavoie :* SANVCIVS F 31 London (G.H.), Corbridge.

*La Madeleine :* ALBILLI M 18 Chesters: 33 Colchester, Corbridge,  
 London (B.M. and G.H.). ALBILLI 31 Corbridge: 33  
 Colchester.

GNATIVS 31 Corbridge: 33 Corbridge: 81 York: — Cirencester.

GNATOS 31 London (G.H.): 33 Corbridge, Leicester.

GNA[ 31 Newstead II., London (G.P.O.).

*Les Allieux and Avocourt :* IASSO F 33 London (B.M.).

*Satto's pottery* ; SATTO F 18 London (G.P.O.) : 31 Corbridge : 33 Colchester, Corbridge, Silchester, London (B.M. and G.H.).

*Heiligenberg* : ANISATVS F — York. ANISATVS — York.

CASSIVS FE — London. CASSIVS F 31 Newstead II. : 33 London (K.W.S.) : — York, Cirencester. CASSI — Bath, London.

CINTVGNATVS 31 London (G.H.) : 33 London (G.H.).

CONSTAS F 31 Corbridge : — London.

CONSTAS 32 London (B.M.).

DOMITIANVS F 18/31 London (B.M.). DOMITIANVS 32 London (G.H.) : — Arlesey. DOMIATAN 32 Leicester.

IVRIVNN 31 Wroxeter : — London.

MAGNVS F 33 London (G.H.), Corbridge.

OF MASO 33 London (G.P.O.).

NIVALIS F 32 London (G.H.).

RVFIVNS 32 London (G.H.).

SACIIANTRO 27 London (G.H.), Wroxeter.

SACIANTR 33 London (B.M.). SACIANT — London.

SEVERINVS FE 31 London (B.M.).

*Ittenweiler* : CIELSINVS F 31 London (G.H.).

CELSINVS F 18/31 London (B.G.) : 31 London (G.H.).

CELSINI F — London.

CELS[ 80 Corbridge.

CINTVSMVS F 38 Wroxeter : 31 Silchester : — London, York, Chesterford.

CINTVSMVS 32 Chester : — Chesterford.

TOCCINVS FE 31 Silchester.

*Rheinzabern* : ABBO F 31 Silchester, Leicester.

ALCIII (? = ALC FE) 33 Silchester.

AMABILIS 27 London (G.H.).

AMANDVS FE — Colchester.

AMATOR 32 London (B.M.).

ASCILLI M — London.

AVGVSTALIS 31 London (B.M.).

AVGVSTINVS 31 London (B.M.), Leicester.

AVITVS F 31 London (B.M.), Newstead II., Leicester, Corbridge, Colchester : 38 London (G.H.) : — Wroxeter, Cirencester.

BELATVLLVS F 31 Corbridge.

BELSVS FEC 80 London (G.H.).

BELSVS F 31 Corbridge, Silchester ; — Chesterford.



*Rheinzabern—continued :*

- CAPITOLINVS — Chesters, Chesterford.  
 CAPRASIVS FE — London. CAPRASIAS FE 18 Wroxeter.  
     CAPRASIVS F 31 London (B.M.), Crocolana.  
     CAPRASIVS — London, Bath.  
 CATVLLI M 33 Corbridge.  
 CATVS FEC 33 Corbridge.  
 CERALIS F 31 London (G.H.). (*N.B.*—Some CERALIS stamps  
     are of Lezoux ware.)  
     CERIAL F 18 London (B.M.): 31 London (B.M.).  
 CLEMENS 31 London (B.M.), Wroxeter: 33 London (G.H.):  
     Tg York: — Leicester. CLEMENTI 33 Leicester.  
 CONATIVS F — Dunstable. CONATIVS — Chesterford.  
 CONSTANS F 31 Ware: 32 London (B.M.): — Colchester.  
 COSTIO PR FE 32 Colchester. COSTIO PR — York.  
 COSTINVTI 31 Silchester.  
 CRASSIACVS F — London.  
 CRISSI M — Newstead II.  
 CVNISSA F 31 Margidunum. CVNISSA — York.  
 DIGNVS 31 London (B.M.).  
 DOCILIS 31 Corbridge: — Wilderspool.  
 FIRMVS FE 33 Silchester: — Colchester. FIRMVS F 33  
     London (G.H.).  
     FIRMVS FC 33 Corbridge.  
 FLAVIANVS F 32 London (B.M.).  
 FLORENTINVS FE — London. FLORENTINVS F 33 London  
     (B.M. and G.H.).  
 FORTIONIS 31 London (G.H.).  
 GENIALIS FECI 32 London (B.M.): 33 Corbridge, Procolitia:  
     — Chester le Street, Newcastle.  
     GENIALIS FEC 31 Colchester. GENIALIS F 33 Cor-  
     bridge.  
     GENIALIS 33 Corbridge. GENIALI I 33 Silchester.  
     GENIALI 33 Silchester: 38 Silchester.  
 HONORATVS F 33 Silchester.  
 IASSVS F 31 Newstead II.: — Colchester.  
 IMPETRATI 31 Corbridge.  
 IOVANTI — London.  
 IVVENIS FEC 32 Colchester: — Arlesey.  
 LATINIAN F — London.  
     LATINIAN — London.  
 LEO FECIT 32 Lincoln.  
 LIBERALIS 38 London (G.P.O.): — Shefford.  
 LILLVTIO — London (B.M.).

*Rhein Zabern—continued :*

- LILTANI M 32 London (B.M.) : — Arlesey.  
 LVTAEVVS FEC 33 London (B.M.).  
     LVTEVS F 31 Wroxeter.  
 MAGIO F 31 Corbridge, Carlisle : 33 Corbridge.  
 MAMMILLIANVS 33 Peterborough.  
     MAMILIANI — York.  
 MARCELLIN F 80 Colchester. MARCELLINVS — York.  
     MARCELLINI 31 London (G.H.), Leicester : 81 London  
         (B.M.).  
 MARITVS M — London (B.M.).  
 MINVS FE — London (B.M.).  
 PACATV F 33 Corbridge : 31 Dymchurch.  
 PATERNVS FE 32 London (B.M.). (*Not* of Lezoux.)  
 PATRICIANVS 31 Silchester.  
 PEPP0 FEC 31 Kenchester : 32 Leicester.  
 PEPIVS FE 31 Silchester.  
 PERPETVI 18/31 Wroxeter : 33 Corbridge : — York.  
 PLACIDVS F 33 Silchester.  
 PRIMITIVVS 32 Margidunum. PRIMITIVI — Sandwich, Lon-  
     don.  
 PROBVS F 31 Corbridge, Wroxeter : 33 Corbridge, Newstead :  
     — London.  
 REGALIS F 31 London (B.M.), Corbridge, Newstead : 33  
     London (B.M.), Corbridge, Silchester : — Rich-  
     borough.  
 REGINVS F 31 London (B.M. and G.H.), Chesters, Corbridge :  
     33 London (G.H.).  
 REGVLINVS 18/31 Colchester : — London.  
 RVFIANI M — Leicester. RVFIANI 33 Corbridge.  
 SABINIANVS F 32 London (B.M.).  
 SATVRIO 33 Wroxeter.  
     SATVRVS 31 Silchester.  
 SECVNDINAVI — Welwyn.  
 SEVERIANVS F 31 London (B.M.) : 33 Silchester.  
 VENICARVS F 31 London (B.M.).  
 VERVS FE 18/31 Silchester. VERVS F — York.  
 VICTOR FE 31 Silchester : 33 Silchester.  
     VICTOR — London.  
 VICTORINVS 18/31 Silchester : 31 Crocolana : — Wickham,  
     London.  
     VICTORINVS FE 31 London (G.H.).  
     VICTORINVS F 31 London (G.H.), Margidunum.  
     VICTORINV 32 London (B.M.).

*Trèves* : LOSSA FEC 3I London (G.H.).

LOSSA — London.

MINVTIVS F — London.

MINVTVS F 3I London (B.M.).

VRSVLVS FE — York.



## CHAPTER III

### DATED SITES

THE approximate dates of occupation are given of certain sites—initial, terminal or both.

MONT BEUVRAY (*Bibracte*).—This Gaulish site was abandoned immediately antecedent to the Christian era. Déchelette (i. p. 31) places the date at about 5 B.C.; Haverfield (*Proc. Camb. Antiq. Soc.* lxxviii. p. 56) at about 12 B.C. Italic Sigillata of Augustan age is solely represented.

MAINZ (*Moguntiacum*).—The legionary fortress was established in the reign of Augustus (Ritterling, *Zur Geschichte des römischen Heeres in Gallien unter Augustus*, Bonn. Jahrb. cxiv. p. 159).

Augustan Italic Sigillata is recorded.

KASTELL (*Castellum Mattiacorum*).—The original fort was constructed by Drusus, in the reign of Augustus, as a *tête-de-pont* opposite Moguntiacum. (See also *O.R.L.* No. 30, p. 16.)

XANTEN (*Castra Vetera*).—The legionary fortress was established in the reign of Augustus (Ritterling, *op. cit.*). Tacitus (*Annals*, i. 58) alludes to *Vetera* early in the reign of Tiberius.

Augustan Italic Sigillata is recorded.

In the reign of Claudius a second fortress was constructed, and was occupied by the V. and XV. Legions down to the end of Nero's reign (Hagen, *Einzelfunde von Vetera*, 1910-1912, Bonn. Jahrb. cxxii. p. 363 sqq.; and Lehner, *Vetera*, Bonn. Jahrb. cxix. p. 234 sqq.).

COLOGNE (*Colonia Agrippina*).—The I. and XX. (*Valeria Victrix*) Legions were stationed here in the reign of Augustus (Ritterling, *op. cit.*).

Remains attributable to this period have been found.

TRÈVES (*Augusta Trevirorum*).—The *Treveri* were conquered by Julius Caesar, and their chief town was made a colony by Augustus. Tacitus (*Annals*, iii. 42) mentions the city.

Augustan Italic Sigillata is recorded.

ANDERNACH (*Antunnacum*). — A fort was built here by Drusus, and the cemeteries date to the reign of Augustus (Lehner, *Antunnacum*, Bonn. Jahrb. cvii. p. 1).

Augustan Italic Sigillata is recorded.

STRASBOURG (*Argentoratum*). — A fort was established here by Drusus (Ritterling, *op. cit.* p. 177).

Augustan Italic Sigillata is recorded.

HALTERN (*Aliso*?). — Tacitus (*Annals*, ii. 7) alludes to the *castellum Lupiae flumini adpositum*. This was one of the forts built upon the river Lippe by Drusus. The occupation was practically confined to the Augustan period. Whilst it extended from 11 B.C. to 16 A.D. (Loeschke, *Haltern*, p. 119), its most intensive occupation may be assigned to the years 11 B.C.-9 A.D., i.e. prior to the Varus disaster.

Augustan Italic Sigillata is solely represented.

OBERADEN.—One of the Drusus-castella on the river Lippe.

SELS TILE WORKS.—Almost all the Sigillata antedates the year 41 A.D. (Ritterling, *Hofheim*, p. 249).

Italian and Provincial Sigillata vessels are represented.

WIESBADEN (*Aquae Mattiacorum*). — The old site was occupied in the reign of Augustus (Ritterling and Pallat, *Röm. Funde aus Wiesbaden*, Ann. des Vereins für nassauische Altertumskunde, xxix. 1898, p. 129).

Italian Sigillata is recorded, and also Tiberian Gaulish Sigillata (Form 29).

KASTELL WIESBADEN is dated by Ritterling (*O.R.L.* No. 31, pp. 66-67) to the reigns of Domitian and Trajan.

For dating purposes it is important to distinguish between the finds of the "old site" and those of the Kastell.

NEUSS (*Novaesium*). — The first legionary fortress was occupied by the XX. Legion in the reign of Tiberius (H. Nissen, *Geschichte von Novaesium*, Bonn. Jahrb. cxi. cxii. 1904, p. 10).

Early Sigillata is datable to this reign.

After the revolt of Civilis (69-70 A.D.) there was a reconstruction of the fortress. For dating purposes it is important to distinguish between the finds of the older fortress (L.F. in our text) and of the occupation dating from 69-70 A.D.

HÖCHST AM MAIN.—Occupied in the reign of Augustus and also of Claudius (*O.R.L.* No. 28, p. 8).

Italic Sigillata is recorded.

FRIEDBERG.—The fort established by Germanicus, 15 A.D., "*super vestigia paterni praesidii in Monte Tauno*" (Tac. *Annals*, i. 56) may actually refer to Friedberg.

Some Italic Sigillata is recorded (*O.R.L.* No. 26, p. 22).

WINDISCH (*Vindonissa*). — This site was occupied in the reign of Augustus by the XIII. Legion for a short time, then by the XXI. (*Rapax*), and under Vespasian by the XI. (*Claudia Pia Fidelis*) Legion. It was not garrisoned after 100 A.D. (A. Hauser, *Vindonissa*, p. 4).

Italic Sigillata is recorded.

BONN (*Bonna*). — One of the forts erected by Drusus between Mainz and Vetera (Florus, iv. 12; and Siebourg, *Die Legio I. (Germanica) in Burginatium*, Bonn. Jahrb. cvii. (1901) p. 132).

It was garrisoned by the I. Legion in the reign of Tiberius (Ritterling, *op. cit.* p. 177).

Italic Sigillata is recorded.

AISLINGEN.—Knorr (*Aislingen*, pp. 1, 2) dates the occupation to Tiberius-Domitian.

HOFHEIM.—(The earth-fort). Ritterling (*Hofheim*, pp. 90 and 95) divides the occupation into two separate periods:

I. "Claudian," 40-51 A.D.

II. "Vespasianic," 74-80, possibly to 83 A.D. Only Provincial Sigillata was imported, but a few Arretine fragments occur as survivals.

GRIMMLINGHAUSEN.—This fortress was occupied 40 A.D. (Ritterling, *Hofheim*, p. 249).

LONDON (*Londinium: Augusta*). — London was already a prosperous settlement in the year 60 A.D. (Tac. *Ann.* xiv. 33).

Early or Claudian Sigillata is plentiful.

The occurrence of examples of Italian Sigillata indicates a pre-Claudian penetration of Roman products.

COLCHESTER (*Camulodunum*). — Made a colony in the reign of Claudius (Tac. *Ann.* xii. 32).

Specimens of South Gaulish Sigillata which date to Claudius and even earlier are forthcoming.

LEICESTER (*Ratae*). — Haverfield in an unpublished paper read before the *Soc. Prom. Roman Studies*, 1918, concludes that the occupation took place in the reign of Claudius, adducing as evidence a tile of a detachment of the VIII. Legion.

Some of the Sigillata is of a Claudian type (see our Pl. XXVIII. 4).

CHESTER (*Deva*). — Haverfield and others conclude that the absence of *cognomina* from inscriptions is not observed later than the reign of Claudius. This absence is noted on an inscription at Chester (*Eph.* vii. 903), and the inference is drawn that it belongs "to the earliest years of the Roman Conquest of Britain—about A.D. 50" (*Grosvenor Museum Catalogue*, p. 42).

The stamps of a few pre-Flavian potters, such as LABIO, have been found.



WROXETER (*Viroconium*).—From the absence of *cognomina* in two inscriptions to soldiers of the XIV. (*Gemina*) Legion, and for other reasons, Haverfield (*V. C. Hist. Shropshire*, i. pp. 244-5) concludes that this site was occupied in the reign of Claudius; see also Bushe-Fox, *Wroxeter*, i. pp. 18-20.

If Mr. H. Bradley's emendation of the passage in Tacitus (*Ann.* xii. 31, *detrahare arma suspectis cunctaque cis Trisantonam et Sabrinam fluvios cohibere parat*) is correct, it is probable that Wroxeter was one of the strongholds constructed on the *limes* or boundary line marked out by Ostorius Scapula.

Early or pre-Flavian pottery and the stamps of Julio-Claudian Sigillata potters, such as AMANDVS, ARDACVS, LICINVS, MODESTVS and MVRRANVS, are forthcoming.

LINCOLN (*Lindum*).—The absence of *cognomina* from two stones inscribed to soldiers of the IX. (*Hispana*) Legion substantially dates the occupation to 55 A.D. or earlier (see Haverfield, *Lincolnshire Notes and Queries*, July 1909, p. 195).

It is probable that Lincoln was occupied in the forward movement initiated by Ostorius Scapula alluded to above (*Tac. Ann.* xii. 31).

For a fuller consideration, see Pryce, *Archaeological Journal*, lxix. 1912, pp. 417-8.

Definitely pre-Flavian Sigillata is not, as yet, forthcoming, but the occurrence of the early form, Dragendorff 24/25 is suggestive.

YORK (*Eburacum*).—The first occupation may be dated to the advance of Petilius Cerialis against the Brigantes (*Tac. Agricola*, 17) in the years 71-74 A.D., when it was probably garrisoned by the IX. Legion. See also Henderson, *English Historical Review*, xviii. p. 16.

For Sigillata of a Vespasianic type, see May, *York*, Pl. I. 1-4, 6; Pl. VI. 14.

ROTTWEIL (*Aræ Flaviae*).—Occupied in the reign of Vespasian, 73-74 A.D. Tacitus (*Germania*, 29, *limite acto promotisque praesidiis*) alludes to the occupation of the Neckar district.

For the evidence of the Sigillata, see Knorr, *Rottweil*, 1907 and 1912.

WALDMÖSSINGEN.—Some Flavian Sigillata is recorded (*e.g.* Form 78); the coins date only between 80 and 110 A.D., and the pottery points to the same period. It was evacuated when the line was advanced to the Miltenberg-Lorch section of the Limes (*O.R.L.* No. 61B, p. 7).

SULZ.—Built shortly after the middle of the first century and probably given up in Domitian's reign (*O.R.L.* No. 61A, p. 7).

ROTTENBURG (*Sumelocenna*).—Occupied a little later than Rottweil, about 80 A.D. For the evidence of the Sigillata, see Knorr, *Rottenburg*.

POMPEII, HERCULANEUM and TORRE ANNUNZIATA were destroyed in the year 79 A.D.

CARLISLE (*Luguwallum*).—The character of the early Sigillata is of the Vespasianic type (see Bushe-Fox, *Arch.* 64, pp. 299-301, and May and Hope, *Carlisle*). The site was probably occupied during the campaigns of Petilius Cerialis against the Brigantes (Tac. *Agricola*, 17), when according to Oman's translation of the passage "the battles were many and sometimes cost much blood; but the greater part of the Brigantian territory was either annexed or devastated." Carlisle lay within the territory of the Brigantes. Although the mention of Cerialis in the "*Agricola*" is quite incidental, the references to his campaigns and his military ability (*famamque obruisset*) are unusually emphatic.

CORBRIDGE (*Corstopitum*).—The character of its early Sigillata is similar to that of Newstead (for examples, see Bushe-Fox, *Arch.* 64, pp. 304-5). No fewer than fourteen fragments of the early form Drag. 29 (from fourteen different vessels) had been discovered by the summer of 1914.

For the evidence of the coins, see Craster, *Arch. Æl.* viii. 3rd series.

NEWSTEAD (? *Trimontium*).—Two occupations:

I. Agricola had advanced as far north as the estuary of the Tay (*Tanaus*) by the summer of 80 A.D. (Tac. *Agricola*, 22). It is therefore highly probable that the construction of the "base"-fort at Newstead was commenced late in the year 79.

That the first occupation was a short and practically Agricolan one is indicated by the character of the Sigillata and by the circumstance (first pointed out to us by Mr. H. H. E. Craster) that there is an absence of bronze coins which can be definitely assigned to the latter half of Domitian's reign and the early years of Trajan.

See also Dragendorff, *Journal of Roman Studies*, i. p. 134.

The lament of Tacitus, *perdomita Britannia et statim missa* (*Histories*, 1, 2), would indeed appear to contain an element of historical truth.

II. The second occupation is assigned to the period 140-180 A.D. (Curle, *Newstead*, p. 340 sqq.).

CAMELON.—Two occupations, Flavian and Antonine:

I. The early Sigillata is of the same type as that of Newstead I. (Bushe-Fox, *Arch.* 64, p. 308-9). Camelon was probably one of the forts constructed by Agricola in the year 80 A.D. (Tac. *Agricola*, 22, *ponendisque insuper castellis spatium fuit*).

II. The site was reoccupied in the reign of Antoninus Pius. Much of the Sigillata is of the Antonine type (Anderson, *Proc. Soc. Antiq. Scotland*, Ser. 3, vol. xi. p. 380).

HEDDERNHEIM (*Nida*).—Heddernheim, Okarben and Kesselstadt are forts of the Wetterau dating to Domitian's advance, c. 83 A.D. (*O.R.L.* No. 25A, p. 1).

The Sigillata dates to Domitian (Wolff, *Heddernheimer Mitt.*, Frankfurt).

OKARBEN.—Occupied in 83 A.D. (*O.R.L.* No. 25A, pp. 1 and 19).

The Sigillata, which dates to Domitian, contains Form 29.

KESSELSTADT.—The earth-fort was built in the reign of Domitian at the same time as Okarben (*O.R.L.* No. 24, p. 6).

The Sigillata also dates to Domitian.

STOCKSTADT.—A small earth-fort was occupied in the reign of Domitian; a larger earth-fort was built in the Trajanic period (97-99 A.D.); and a stone fort was erected under Hadrian (*O.R.L.* No. 33, p. 37).

Flavian Sigillata has been recorded.

NECKARBURKEN.—Built in the latter part of Domitian's reign, or more probably by Trajan (*O.R.L.* No. 53, p. 21).

FAIMINGEN.—Built in the early part of Domitian's reign (*O.R.L.* No. 66C, p. 29).

Flavian Sigillata has been recorded.

URSPRING.—The earth-fort was built in the middle of Domitian's reign, or, at latest, in the early part of Trajan's reign; the stone-fort was built at the earliest under Trajan. It was evacuated before 161 A.D. and perhaps soon after 154 A.D. (*O.R.L.* No. 66A, p. 31; and Oelmann, *Niederbieber*, p. 3).

TAUNUS LIMES.—Jacobi (*Führer durch das Römerkastell Saalburg*, p. 12) casts some doubt upon the construction of the *limes* by Domitian during his advance against the Chatti in 83 A.D., and it is true that "finds" datable to the Flavian period are relatively few.

On the other hand, the testimony of Frontinus, writing a few years after the event (*Strategematon*, I. iii. 10, *limitibus per centum viginti milia passuum actis . . . subiecit ditioni suæ hostes quorum refugia nudaverat*), that Domitian established a chain of frontier defences 120 miles in length, a distance closely corresponding to that of the *limes* between Rheinbrohl and Kesselstadt, indicates very clearly a Flavian construction.

So also the occurrence of the stamps of early or first-century potters, such as BASSVS (of Bassi), CALVVS, COSIRVFINVS, MVRANVS, PAVLVS (of Pavli), PATRICIVS (of Patri), PONTVS, SEVERVS (of Sever), VIRTVS, VITALIS (of Vita), and ? BOLLVS at Saalburg, points very definitely to a Flavian occupation.

KAPERSBURG.—The earth-fort was occupied from Domitian to Hadrian; wood and stone-fort from Hadrian to Antoninus Pius; second stone-fort from Caracalla to 260 A.D. (*O.R.L.* No. 12, p. 19).



CANNSTATT.—This site was occupied in the reign of Domitian, about 84 A.D.

For the character of its Sigillata, see Knorr, *Cannstatt*.

GELLYGAER.—The Sigillata finds are mainly of the period Domitian-Trajan (see Ward, *Gellygaer*). The latest coin is a first brass of Hadrian. It is possible that the recently discovered earth-fort may be dated to the campaigns of Frontinus, 74-78 A.D. (Tac. *Agricola*, 17).

BREGENZ "CELLAR-FIND."—The Sigillata is clearly transitional in the majority of examples (see our Pl. XVI.), and may largely be assigned to the reign of Trajan (Jacobs, *Sigillatafunde aus einen römischen Keller zu Bregenz*). The "find" may be approximately dated to 80-110 A.D.

PFÜNZ (*Ventoniana* ?).—Occupied in reign of Trajan (*O.R.L.* No. 73, p. 18).

HADRIAN'S WALL.—The wall-inscriptions mainly date from 123-4 A.D. (Oman, *England before the Norman Conquest*, p. 111). See also Haverfield, *Proc. Soc. Antiq. Lond.* xiv. p. 44.

OUTER GERMAN LIMES.—This frontier-line was probably constructed in the reign of Antoninus Pius about 140-150 A.D., and was occupied down to 250-260 A.D., when it was irretrievably lost under Gallienus.

MILTENBERG.—This site is at the northern extremity of the outer limes, where it joins up to the Stockstadt line.

WALLDÜRN.—Erected at the same date as the whole of the Miltenberg-Welzheim line (*O.R.L.* No. 39, p. 11).

OSTERBURKEN.—"None of the finds or inscriptions answer the question as to when the fort was built; it was evacuated 260 A.D." (*O.R.L.* No. 40, p. 27).

The Sigillata indicates an Antonine and later occupation.

OEHRINGEN.—"Built at the same date as the other forts of the Miltenberg-Welzheim line" (*O.R.L.* No. 42, p. 16).

WELZHEIM.—"Built about the middle of the second century at the same time as the other camps of the Outer Limes" (*O.R.L.* No. 45, p. 13).

ANTONINE WALL.—This *limes* was constructed about 140-42 A.D., and was occupied until about 180 A.D. (see Macdonald, *The Roman Wall in Scotland*, p. 8 *sqq.*). The account given by Julius Capitolinus (*Vit. Ant. Pii*, v. 4) of the erection of this wall by Lollius Urbicus is confirmed by a legionary tablet (Macdonald, *op. cit.* p. 313, No. 20). The Fort of Balmuldy, excavated by Mr. S. N. Miller, has produced a quantity of Sigillata of the Antonine type.

PUDDING PAN ROCK FIND.—The date of the wreck or wrecks upon this rock may be assigned to between the years 150-190 A.D. For an account,

see R. A. Smith, *Proc. Soc. Antiq. Lond.* xxi. pp. 268, 599; xxii. pp. 395 *sqq.*

NIEDERBIEBER.—This site was occupied during the period 190-260 A.D. (Oelmann, *Niederbieber*, p. 2).

VERMAND.—Cemetery of skeleton-graves. Dates from the end of third century to beginning of fifth century. The coins date from Probus to Honorius (Eck, *Les deux cimetières galloromains de Vermand et de St. Quentin*, 1891).

HUNTCLIFF (YORKS).—A late Roman "shore"-station occupied from about 370 to 390 A.D. (*Journal of Roman Studies*, ii. p. 215).

## CHAPTER IV

### STAMPS OF WELL-ATTESTED POTTERS

POTTERS' stamps are extremely common on Sigillata vessels of the first and second centuries. The name of the potter may, however, be supplanted sporadically by a rosette even in the first century (Pl. III. 7), and this practice became more common in the second century. In the third century the rosette stamp is still more frequent, so that at Niederbieber (190-260 A.D.) it constitutes 30 per cent. of all the stamps.

The stamps usually occur in a rectangular oblong with rounded corners. Sometimes the oblong is concave at both ends, thus constituting the "swallow-tailed" stamp, an obvious derivative of a somewhat late form used in Italian Sigillata.<sup>1</sup> Similar Italian influence is seen, though rarely, in the occurrence of the double or superimposed stamp, *e.g.*  $\frac{\text{OFFIC}}{\text{ACVTI}}$  Silchester,  $\frac{\text{SS.DIV}}{\text{AVOTII}}$  La Graufesenque.

Sometimes the stamp is circular or oval, as in the case of the Flavian potter SABINVS (Walters, *C.R.P.* M 393) and the second-century worker REGINVS (Pl. XII. 6).

In the case of plain wares the stamps are almost invariably found on the basal interior, but they may occur exceptionally (and in the second century) on the external wall of the vessel (Pl. LXI. 7 SVRDIM; 8 GNATIVS). In the carinated bowl, Form 29, the stamp is found almost always on the basal interior, but occasionally this is supplemented by an external stamp occurring amongst the decoration (Pl. XXVI. 5 VOLVS)—a technique which had already been practised by the Italian potter ATEIVS and his slave XANTHVS (Pl. II. 2).

In the other decorated bowls, the stamp, when present, is found either amongst, below or above the ornamental design. Some very occasional exceptions, however, occur in the case of Form 37 (Déchelette, i. Nos. 74 FELICI OF, 172 SECVNDINVS, 173 SECVNDI, all on the basal interior).

<sup>1</sup> Cp. Walters, *C.R.P.* M8  $\frac{\text{LIBNVS}}{\text{}} \frac{\text{}}{\text{}}$  and with the Italian stamps Loeschcke No. 9  $\frac{\text{INGE}}{\text{LANNI}}$  and No. III  $\frac{\text{XANTHI}}{\text{}} \frac{\text{}}{\text{}}$ .  
Atkinson, *Pompeii*, No. 26,  $\frac{\text{OF VITA}}{\text{}} \frac{\text{}}{\text{}}$



Since frequent reference is made in the text to certain well-known potters, it has been thought advisable to preface the description of the various forms and decorative designs of Terra Sigillata with a list of selected well-known potters, and to attempt to allot them to the periods of their chief activity. Some overlapping is unavoidable, but every effort has been made to ensure such accuracy as the present state of our knowledge permits. In the following tables the provenance of the potters' stamps has been restricted, so far as possible, to well-dated sites. The date of a site may, in many instances, be merely a *terminus a quo*, such as London, but when it is studied and compared with the *terminus ad quem* afforded by such sites as the earth-fort at Hofheim, it may result in evidence of much chronological value.

Under the heading of provenance no attempt has been made to enumerate *all* the sites where the wares of the particular potter have been found, but only the earliest, the latest and the intermediate localities are enumerated. A reference to the dates of the various sites mentioned in this list and to our chronological table will explain the *raison d'être* of the classification.

Finally, in arriving at an estimate of the chronological value of potters' stamps, a number of reservations must be borne in mind, of which the following are the chief:

(a) The length of the working life of a potter or of his *officina* may have been unusually prolonged. The factory may in some instances have been handed down from father to son. If, for example, we take the case of the potter MOMO, we find that he (or his *officina*) was active from pre-Claudian times down to late in the reign of Vespasian, *i.e.* from about 35 to 80 A.D.

(b) Two or more potters of quite different periods may have worked under the same name, *e.g.* IVCVNDVS and VITALIS of South Gaul, and IVCVNDVS and VITALIS of East Gaul.

(c) It should also be remembered that the stamped wares of certain potters, which were produced within a definite limit of time, may have reached different parts of the Empire at slightly varying dates. By way of illustration, let us assume (and it seems to be quite a probable assumption) that the early occupation of Newstead was a short one, *viz.* 79/80-86 A.D. It is conceivable that much of its Sigillata ware may have been furnished from stock of Vespasianic date already in store in South Britain.

(d) The fabric of an early potter may sporadically be found on a later site. A "survival," when its evidence is negated by that of the mass of Sigillata finds occurring on a given site, is not sufficient in itself to affect the general chronological conclusion.

(e) Some confusion may occasionally arise from the not uncommon use of the mould of a potter by contemporary or later workers. Thus the potter MERCATOR made use of a mould of CINNAMVS (Wroxeter, *Report*, i. p. 45) and the potter LVTAEVVS worked with a mould of REGIVS (Knorr,

*Rottweil*, 1907, Pl. XXVII. 9). Many other examples of this practice will be found in our list of potters' stamps on Form 37 (p. 105).

*Explanations and Abbreviations.*

When two or more potters bear the same name, the fact is indicated by the prefix (i) or (ii).

Frequent reference is made (in brackets) to illustrations of decorated vessels. Where this ware is illustrated in this work, the plate alone is given; otherwise the authority is quoted.

Drag.	=Dragendorff.
Déch.	=Déchelette.
Ritt.	=Ritterling.
Ludow.	=Ludowici.
I.	=First period of occupation.
II.	=Second period of occupation.
O.L.	=Early stratum (old layer).
L.F.	=Legionary Fortress.
T.	=Period of Tiberius and Caligula.
C.N.	=Period of Claudius and Nero.
M.S.	=Marbled Sigillata.

I. JULIO-CLAUDIAN OR PRE-FLAVIAN POTTERS.

Potters who worked in one or other, or in all of the reigns of Tiberius, Caligula, Claudius and Nero, and whose activity had probably ceased before the accession of Vespasian.

POTTERS.	FORMS.	PROVENANCE AND REMARKS.
(i) ACVTVS	Ritt. 5, 9. Drag. 24/25, 29 - -	Sels, Xanten, Vindonissa, London, Silchester, Pleshey, Montans (mould). (Pl. XXVI. 6). Knorr ( <i>Terra Sigillata</i> , 1919, Pl. 95K) illustrates the work of a later or Nero-Vespasian ACVTVS.
ABITVS	Ritt. I. Drag. 18, 27 - - -	Sels, Xanten, Hofheim I., Novesium L.F., Wiesbaden O.L., London, Leicester.
(i) AMANDVS	Drag. 27, 29 -	Sels, Hofheim I., Wiesbaden O.L., London, Wroxeter. (Knorr, <i>Terra Sigillata</i> , 1919, Pl. 6). Decorated work of Tiberio-Claudian type. To be distinguished from AMANDVS of Rheinzabern.
AQVITANVS	Ritt. 8, 9. Drag. 24/25, 15/17, 18, 27, 29 - - -	Sels, Hofheim I., Xanten C.N., Novesium L.F., Wiesbaden O.L., Aislingen, London, Colchester, Chester. (Pl. III. 9). The activity of this potter was chiefly pre-Neronian.

## TERRA SIGILLATA

POTTERS.	FORMS.	PROVENANCE AND REMARKS.
ARDACVS	Ritt. 9. Drag. 24/25, 15/17, 18, 27, 29	Sels, Hofheim I., Novæsium L.F., Wiesbaden O.L., Aislingen, London, Silchester M.S., Wroxeter. (Pl. V. 3).
BALBVS	Drag. 17, 18, 29	Sels, Mainz, Hofheim I., Wiesbaden O.L., Aislingen, London. (Curle, <i>Terra Sigillata</i> , Fig. 14; Knorr, <i>Terra Sigillata</i> , 1919, Pl. 11A).
BELLICVS		Sels, Hofheim I., Wiesbaden O.L., Vindonissa, Vechten.
BILICATVS	Drag. 17, 15/17, 18, 29	Xanten T., Sels, Hofheim I., Wiesbaden O.L., Mainz T., Vindonissa, Vechten, London, Richborough. (Pl. III. 4; and Knorr, <i>Terra Sigillata</i> , 1919, Pl. 14A, B; Pl. 15F). Forms 29 by BILICATVS, SCOTTIVS and SENICIO date to the reign of TIBERIVS.
BIO	Ritt. 8. Drag. 24/25, 27, 29	Sels, Hofheim I., Novæsium L.F., Aislingen, Mainz, Vechten, Pompeii M.S., London.
CAPITO	Drag. 24/25, 27	Sels, Hofheim I., Vechten, Colchester.
(i) CARVS	Drag. 18, 27, 29	Sels, Hofheim I., Wiesbaden O.L., London, Colchester. (Knorr, <i>Terra Sigillata</i> , 1919, Pls. 19, 20). Decorated work of the period Claudius-Nero. To be distinguished from CARVS of Rheinzabern.
CELER	Drag. 27, 29	Sels, Hofheim I., Arles (CELEROS, M.S.), Montans.
COMICATO	Drag. 27	Sels, Hofheim I., Novæsium L.F., Wiesbaden O.L., Banassac.
DAMONVS	Ritt. 8. Drag. 27, 15/17, 18, 29	Sels, Vechten, London, Silchester, Mainz. (Knorr, <i>Terra Sigillata</i> , 1919, Pl. 32).
DARRA	Ritt. 9. Drag. 27, 15/17, 29	Sels, Hofheim I., Novæsium L.F., Mainz, Aislingen, Silchester. (Knorr, <i>Terra Sigillata</i> , 1919, Pl. 32).
GALLICANVS	Drag. 29	Mainz, Aislingen, London. (Knorr, <i>Aislingen</i> , Pl. V. 1; and <i>Terra Sigillata</i> , 1919, Pl. 33).
INGENVVS	Ritt. 8. Drag. 27, 15/17, 18, 29	Sels, Hofheim I., Novæsium L.F., Xanten C.N., Aislingen, London, Silchester, Cirencester, Rottweil. The piece found at Rottweil with this potter's stamp is probably a "survival." (Knorr, <i>Terra Sigillata</i> , 1919, Pl. 40A, Pl. 41F).
LABIO	Ritt. 8. Drag. 27, 15/17, 18, 29	Sels, Hofheim I., Novæsium L.F., Aislingen, London, Colchester, Silchester, Chester. (Knorr, <i>Aislingen</i> , Pl. III. 10; and <i>Terra Sigillata</i> , 1919, Pl. 44A, B, C, and text-figures 38 and 43).




POTTERS.	FORMS.	PROVENANCE AND REMARKS.
LEPIDVS	Drag. 24/25, 27, 18	Sels, Hofheim I., Mainz, Trèves, London, Silchester.
LICINVS	Drag. 24/25, 27, 18, 29	Sels, Hofheim I., Wiesbaden O.L., Xanten C.N., Mainz, Aislingen, London, Colchester, Silchester, Cambridge. (Pl. IV. 4; and Knorr, <i>Terra Sigillata</i> , 1919, Pls. 45, 46).
MACCARVS	Ritt. 1, 5, 9. Drag. 27, 16, 15/17, 18, 33 (earliest type), 29	Sels, Hofheim I., Xanten C.N., Novæsium L.F., Wiesbaden O.L., Mainz, Aislingen, London, Southwark, Silchester, Cambridge. (Knorr, <i>Terra Sigillata</i> , 1919, Pl. 49A, B; Pl. 51, J).
POTITVS	"Flat plate (16 cm. diam.)," "little cup"	Sels, Hofheim I., Xanten, Trèves, Vaison (VOLVS II ET POTITI O).
QVINTANVS	Ritt. 9. Drag. 27 -	Sels, Hofheim I., Novæsium L.F., Wiesbaden O.L., Aislingen.
REGENVS	Drag. 15/17, 18 -	Sels, Hofheim I., Wiesbaden O.L., Aislingen, London, Colchester.
ROGATVS	Ritt. 9. Drag. 27, 33	Sels, Hofheim I., Mainz, Xanten, Vechten.
SALVETVS and SALVIVS	Ritt. 8. Drag. 24/25, 27, 17, 15/17, 18, 29	Sels, Wiesbaden O.L., Xanten C.N., Mainz, Aislingen, London, Colchester, Friedberg, Montans (mould SALVIVS). SALVIVS and SALVETVS are probably variants of the name of the same potter. The stamp SALVETV (Form 18) found at Friedberg is presumably contemporary with the earlier occupation.
SCOTTIVS	Ritt. 5. Drag. 24/25, 27, 15/17, 18, 29	Sels, Weisenau T., Mainz, Hofheim I., Novæsium L.F., Wiesbaden O.L., Aislingen, London, Silchester, Cologne grave (with Drag. 17 by XANTHVS). His Form 29 dates to the reign of Tiberius. (Pl. III. 6; and Knorr, <i>Terra Sigillata</i> , 1919, Pls. 70-72). The variants SCOTTNVS, SCOTNS, SCOTNI occur at Mainz, London, Colchester, Silchester. At Carlisle the stamp SCOTNI is obviously a survival.
SENICIO	Drag. 24/25, 27, 15/17, 29	Sels, Mainz T., Hofheim I., Novæsium L.F., Wiesbaden O.L., Aislingen, London, Silchester. (Pl. III. 5; and Knorr, <i>Terra Sigillata</i> , 1919, Pls. 75-77). His Form 29 dates to the reign of Tiberius.
STABILIO	Drag. 27, 29, 11 (?) -	Sels, Hofheim I., Weisenau T., Mainz, Vechten. (Knorr, <i>Terra Sigillata</i> , 1919, Pl. 79 A, B). Not to be confused with STABILIS of Rheinzabern.

## TERRA SIGILLATA

POTTERS.	FORMS.	PROVENANCE AND REMARKS.
VAPVSO	Ritt. 8. Drag. 24/25, 27, 15/17, 18, 29	Sels, Hofheim I., Xanten C.N., Wiesbaden O.L., Mainz, Aislingen. (Knorr, <i>Terra Sigillata</i> , 1919, Pl. 80).
VOLVS	Drag. 18, 11, 29, 30	Autun, Paris, Langres, Hofheim I., Xanten, Weisenau, London, Colchester, Silchester. (Pls. XIX. 1; XXVI. 5; and Knorr, <i>Terra Sigillata</i> , 1919, Pl. 84 A, B).

## II. EARLY POTTERS WHOSE ACTIVITY CONTINUED INTO THE FLAVIAN PERIOD.

POTTERS.	FORMS.	PROVENANCE AND REMARKS.
(i) BASSVS	Drag. 24/25, 27, 33, 15/17, 18, 29	Sels, Hofheim I., Xanten C.N., Novæsium L.F., Wiesbaden O.L., Aislingen, London, Colchester, Exeter, Friedberg, Corbridge, Saalburg, Heddernheim, Kesselstadt. The products of BASSVS are chiefly Pre-Flavian. (Pl. VI. 2).
BASSVS COELVS	Ritt. 8. Drag. 24/25, 27, 18, 29	Sels, Hofheim I., Novaesium L.F., Wiesbaden O.L., Aislingen, London, Pompeii. (Pl. IV. 1).
CALVVS	Drag. 15/17, 16, 18, 27, 33, 29, 37	Sels, Novaesium L.F., Wiesbaden O.L., Hofheim II., Rottweil, London, Carlisle, Corbridge, Camelon. The decorated work of CALVVS is of the Nero-Flavian type (Knorr, <i>Terra Sigillata</i> , 1919, Pl. 17, and <i>Aislingen</i> , Pl. VIII. 6).
(i) CRESTIO OR CRESTVS	Drag. 5, 24/25, 27, 33, 15/17, 18, 29	Sels, Novaesium L.F., Wiesbaden O.L., Hofheim, Aislingen, Rottweil, London, Colchester, Wroxeter, Silchester, Carlisle, Corbridge. The decorated work of CRESTVS is of the period Claudius-Vespasian (May, <i>Silchester</i> , Pl. VI. A; our Pl. VI. 3). This potter should be distinguished from the later M. CRESTIO ( <i>q.v.</i> ).
FELIX	Drag. 24/25, 27, 33, 15/17, 18, 29, 37	Sels, Xanten C.N., Novaesium L.F., Wiesbaden O.L., Hofheim, Aislingen, London, Colchester, Silchester, Margidunum, Friedberg. (Knorr, <i>Terra Sigillata</i> , 1919, Pl. 32). The decorated work of this potter is of the Nero-Vespasian period. To be distinguished from the potter FELICIO.
FIRMO	Ritt. 8. Drag. 24/25, 27, 18, 29	Sels, Hofheim I., Xanten C.N., Novaesium L.F., Wiesbaden O.L., London, Colchester, Silchester, Newstead I., Camelon. (Knorr, <i>Terra Sigillata</i> , 1919, Pl. 32).

POTTERS.	FORMS.	PROVENANCE AND REMARKS.
(i) IVCVNDVS	Drag. 27, 18, 18/31, 31, 29	Sels, Novæsium L.F., Wiesbaden O.L., Hofheim II., London, Colchester, Silchester, Rottweil, Friedberg, Corbridge, Newstead I. The chief activity of this potter lay in the early Flavian period (Pl. III. 3; Wroxeter II. Pl. XII. 3). For work of an earlier character, see Knorr, <i>Terra Sigillata</i> , 1919, Pl. 43 c, B. He is to be distinguished from the later IVCVNDVS of Rheinzabern.
MASCLVS or MASCVLVS	Ritt. 1. Drag. 24/25, 27, 16, 15/17, 17, 18, 29, 30	Sels, Novæsium L.F., Wiesbaden O.L., Hofheim, London, Colchester, Silchester, York, Newstead I. The decorated work of this potter is of the period Claudius-Nero (Pls. VIII. 2; IX. 4). MASCLVS F is the earlier stamp. He is to be distinguished from the later MASCVS or MASCVVS.
(i) MODESTVS	Ritt. 9. Drag. 24/25, 27, 33, 16, 17, 15/17, 18, 29	Sels, Hofheim I., Novæsium L.F., Wiesbaden O.L., Aislingen, London, Colchester, Silchester, Wroxeter, Leicester. The indubitable stamps of MODESTVS appear to proceed exclusively from sites occupied in pre-Flavian times. The doubtful stamps OF MO and OF MOI (possibly of Momo) occur in the Flavian period at Pompeii, Rottweil and Friedberg. His decorated work is of the period Claudius-Nero (Pl. XXV. 5; see also Ritterling, <i>Hofheim</i> , xxiv. 9; May, <i>Silchester</i> , vii. B). He is to be distinguished from the later MODESTVS of Rheinzabern.
MOMO or MOMMO	Ritt. 1, 8, 9. Drag. 24/25, 27, 33, 16, 15/17, 18, 29, 30, 37	Sels, Novæsium L.F., Wiesbaden O.L., Hofheim, Aislingen, London, Colchester, Pompeii, Rottweil, Carlisle, Corbridge. The earliest form of stamp is  The decorated work of this potter is of the period Nero-Vespasian (Pls. V. 5; VI. 4, 10; see also Déchelette, i. Fig. 65; Atkinson, <i>Pompeii</i> , Figs. 1-23).
(i) MONTANVS	Drag. 27, 15/17, 18 -	Sels, Novæsium L.F., Wiesbaden O.L., Hofheim, London, Leicester, York, Carlisle, Corbridge. He is to be distinguished from the East Gaulish MONTANVS.
MVRRANVS	Drag. 27, 16, 15/17, 18, 33, 29	Sels, Hofheim I., Novæsium L.F., Wiesbaden O.L., Aislingen, London, Silchester, Colchester, Wroxeter, Rottweil, Corbridge. The products



POTTERS.	FORMS.	PROVENANCE AND REMARKS.
		of this potter are chiefly pre-Flavian. (Knorr, <i>Terra Sigillata</i> , 1919, Pl. 59).
NIGER	Ritt. 8, 9. Drag. 24/25, 27, 33, 15/17, 18, 29	Sels, Novæsium L.F., Wiesbaden O.L., London, Colchester, Silchester, Wroxeter, Leicester, York, Rottweil. His decorated work is of the Nero-Vespasian type (Knorr, <i>Terra Sigillata</i> , 1919, Pl. 61).
(i) PAVLLVS	Ritt. 5, 8. Drag. 27, 33, 18, 18/31, 30, 29	Sels, Hofheim I., Wiesbaden O.L., Aislingen, London, Colchester, Pompeii, York, Rottweil, Corbridge. Although the plain fabric of PAVLLVS dates back to pre-Claudian times, his decorated ware is of the Flavian type (Déchelette, i. Fig. 66; our Pl. IX. 9). He is to be distinguished from the second-century PAVLLVS of Lezoux.
(i) PRIMVS	Ritt. 8. Drag. 24/25, 27, 33, 16, 15/17, 18, 18/31, 22/23, 29, 37	Sels, Xanten C.N., Novæsium L.F., Hofheim, Aislingen, London, Colchester, Silchester, Trèves M.S., Pompeii M.S., Frankfort M.S., Wroxeter, York, Carlisle (?), Rottweil. Although the plain fabric of PRIMVS dates back to pre-Claudian times, his decorated ware appears to be of the period Nero-Vespasian. (Pl. IV. 5; see also May, <i>Silchester</i> , vi. B, vii. A; Bushe-Fox, <i>Wroxeter</i> I., Pl. XIII. 4; and Knorr, <i>Terra Sigillata</i> , 1919, Pls. 66, 67). It is possible that more than one potter worked under this name in the first century.
(i) and (ii) SECVNDVS	Ritt. 5, 8, 9. Drag. 24/25, 27, 33, 15/17, 18, 18/31, 29, 37	Sels, Hofheim I., Xanten C.N., Novæsium L.F., Wiesbaden O.L., Aislingen, Cologne (grave with coin of Nero), London, Colchester, Wroxeter, Pompeii, Rottweil, Carlisle, Newstead I. The stamp SECVNDVS occurs both at La Graufesenque and Lezoux. Although the plain fabric of this potter dates back to pre-Claudian times, his decorated work appears to be of the Nero-Flavian period (see Déchelette, i. No. 173: 2, 3; Atkinson, <i>op. cit.</i> Fig. 24; and Knorr, <i>Terra Sigillata</i> , 1919, Pls. 73, 74). He is to be distinguished from the later East Gaulish SECVNDVS of Les Allieux.
(i) SILVANVS or SILVINVS	Drag. 24/25, 27, 33, 15/17, 18, 18/31, 29	Sels, Novæsium L.F., Wiesbaden O.L., Hofheim, Arles M.S., Aislingen, London, Silchester, Rottweil, Carlisle,

POTTERS.	FORMS.	PROVENANCE AND REMARKS.
		Corbridge, Newstead I. Bregenz "Cellar-Find" (80-110 A.D.). The earliest stamp is SILVANVS. (May, <i>Silchester</i> , Pl. IX. A). His decorated work is of the period Nero-Vespasian. He is to be distinguished from the later East Gaulish SILVINVS.
VIRTUS or VIRTHVS	Drag. 24/25, 27, 15/17, 18, 31, 29	Sels, Novæsium L.F., Wiesbaden O.L., Hofheim II., London, Colchester, Silchester, Pompeii, York, Carlisle, Corbridge, Rottweil, Praunheim. (Knorr, <i>Terra Sigillata</i> , 1919, Pl. 81)
(i) VITALIS	Drag. 24/25, 27, 33, 17, 15/17, 18, 18/31, 29	Sels, Novæsium L.F., Wiesbaden O.L., Hofheim II., Aislingen, London, Colchester, Silchester, Arles M.S., Pompeii, Leicester, York, Carlisle, Corbridge, Newstead I. The decorated work of this potter is usually of a high order and of the period Nero-Vespasian (Pl. V. 9; see also Atkinson, <i>op. cit.</i> Figs. 26-30). He is to be distinguished from the later VITALIS of Rheinzabern, whose work is found at Niederbieber.

## III. NERO-FLAVIAN POTTERS.

POTTERS.	FORMS.	PROVENANCE AND REMARKS.
(i) APER	Ritt. 8. Drag. 27, 18, 18/31	Novæsium L.F., Hofheim, Aislingen, Pompeii, Naples M.S., London, Colchester, Leicester, Rottweil. He is to be distinguished from the later APER of Rheinzabern.
CRISPVS	Drag. 27, 33, 18, 18/31, 31, 29 or early 37	Novæsium L.F., Wiesbaden O.L., Hofheim, Aislingen, Wroxeter, Cirencester, Newstead I.
(i) GERMANVS	Drag. 27, 16, 15/17, 18, 18/31, 29, 30, 37. Knorr 78	Novæsium L.F., Wiesbaden O.L., Hofheim, Aislingen, London, Colchester, Silchester, Pompeii, Rottweil, Carlisle, Corbridge, Strasbourg, Bregenz "Cellar-Find" (early period). The decorated work of this potter is of the period Nero-Vespasian (Pl. IV. 8; IX. 6; X. 4; XI. 7; XX. 2). A decorated carinated bowl at Pompeii is of Neronian type. He is to be distinguished from the later GERMANVS of Western-dorf.
MANDVILVS	Drag. 27, 33, 18, 18/31, 29	Wiesbaden O.L., Hofheim, London, Wroxeter, Pompeii. (Pl. VI. 8; see also Atkinson, <i>op. cit.</i> Figs. 31, 32).

## TERRA SIGILLATA

POTTERS.	FORMS.	PROVENANCE AND REMARKS.
(i) MATVGENVS	Ritt. 8. Drag. 27, 17, 15/17, 18, 18/31, 29	Novæsium L.F., Wiesbaden O.L., Hofheim, Aislingen, London, Leicester, Friedberg. (Knorr, <i>Aislingen</i> , Pl. IV. 3). He is to be distinguished from the later MATVGENVS of Westerndorf.
MEMOR	Drag. 24/25, 27, 33, 18, 18/31, 37	Novæsium L.F., Wiesbaden O.L., Aislingen, Hofheim II., London, Colchester, Silchester, Pompeii, Rottweil, Chester, Friedberg. (Pl. XV. 6).
NEQVRES	Drag. 27, 33, 18/31	Novæsium L.F., Wiesbaden O.L., Hofheim II., Rottweil, London, Wroxeter.
PASSENVS OR PASSIENVS	Drag. 24/25, 27, 33, 15/17, 18, 18/31, 29	Novæsium L.F., Wiesbaden O.L., Hofheim, Aislingen, London, Colchester, Leicester, Holt, Rottweil, Carlisle, Saalburg. The decorated work of this potter is chiefly of the Nero-Flavian type (Pl. IV. 2, 3; see also Walters, <i>C.R.P.</i> Pl. XXII.; and Knorr, <i>Terra Sigillata</i> , 1919, Pls. 62-64).
(i) PATRICIVS	Drag. 24/25, 27, 33, 16, 15/17, 18, 18/31, 29	Novæsium L.F., Wiesbaden O.L., Hofheim II., Aislingen, London, Colchester, Leicester, Pompeii, Rottweil, Carlisle, Friedberg, Camelon. (Atkinson <i>op. cit.</i> Fig. 34). This potter's stamp occurs in the Sels collection, but it is probably of later date than 40 A.D. A later PATRICIVS probably worked in Central Gaul in the Trajan-Hadrian period.
(i) RVFINVS	Drag. 27, 33, 18, 18/31, 31, 29, 37	Novæsium L.F., Wiesbaden O.L., Hofheim II., London, Leicester, Pompeii, Rottweil, Carlisle, Newstead I., Camelon. The decorated work of RVFINVS belongs chiefly to the Flavian period (Pl. V. 7; Curle, <i>Newstead</i> , p. 215, Fig. 5; and Knorr, <i>Terra Sigillata</i> , 1919, Pls. 68, 69). He is to be distinguished from the later RVFINVS of Heiligenberg.
(i) SEVERVS	Drag. 27, 33, 18, 31, 29, 37	Novæsium L.F., Wiesbaden O.L., Hofheim, Aislingen, London, Colchester, Silchester, Rottweil, Carlisle, Newstead I. His decorated work is of the Flavian type (Pl. IV. 6). He is to be distinguished from one or more East Gaulish potters of the same name.



## IV. FLAVIAN POTTERS.

It is probable that the activity of most of the potters in this list commenced in the Flavian period. Many of them were also at work in Trajan's reign.

POTTERS.	FORMS.	PROVENANCE AND REMARKS.
BIRACILLVS	Drag. 27, 33, 15/17 (late type), 37	London, Silchester, Wroxeter, Margidunum, Corbridge, Rottenburg, Cannstatt, Nether Denton. The activity of this potter probably extended into Trajan's reign. (Pl. XIX. 5).
CARILLVS	Drag. 33, 18, 29 -	London, Cirencester, Vechten, Strasbourg, York, Rottweil. (Pl. V. 8).
(i) CENSOR	Drag. 27, 33, 18, 18/31, 29	London, Leicester, Margidunum, York, Rottweil, Corbridge, Friedberg. The stamp OF CEN occurs at Sels; if it belongs to the same potter, viz. CENSOR, he must have commenced work before 41 A.D. His decorated work is typically Flavian (Knorr, <i>Terra Sigillata</i> , 1919, Pl. 22). This potter is to be distinguished from CENSORINVS of Lezoux and CENSOR of Trèves.
(i) COBNERTVS	Drag. 33, 18, 29, 30. Knorr 78	Lezoux, Baden-Baden, Regensburg, Druisheim. He probably continued to work in the Trajanic period (Pl. X. 6).
COELVS	Drag. 27, 33, 18, 29	London, Wroxeter, Rottweil, Carlisle. Cp. BASSVS COELVS in Table II. His decorated work is of typical Flavian type (Knorr, <i>Terra Sigillata</i> , 1919, Pls. 23, 24).
COSIVS RVFINVS or RVFVS	Drag. 27, 18, 18/31, 31, 29	London, Wroxeter, Carlisle, Newstead I., Camelon, Bregenz "Cellar-Find". (Bushe-Fox, <i>Arch.</i> 64, Fig. 7; and Knorr, <i>Terra Sigillata</i> , 1919, Pl. 24).
L. COSIVS and L. COSIVS VIRILIS	Drag. 27, 33, 18, 18/31, 31, 37	London, Wroxeter, Holt, Rottweil, Friedberg, Corbridge, Bregenz "Cellar-Find." (Pl. V. 2; Pl. XIX. 6; and Knorr, <i>Terra Sigillata</i> , 1919, Pls. 25-27). His activity probably continued into Trajan's reign. Two separate potters may be here included, but the decoration is of the same period.
COTTO	Drag. 27, 18, 31 -	London, Wroxeter, Newstead I., Friedberg, Hedderheim. The references to forms and sites are restricted to the stamps OF COTTO, COTTO F and COTTON. (OF COTOI occurs on Form 29 at Wroxeter, Bushe-Fox, <i>Wroxeter I.</i> , Pl. XIII. 1; and at Bonn, Knorr, <i>Terra Sigillata</i> , 1919, Pl. 27).

POTTERS.	FORMS.	PROVENANCE AND REMARKS.
M. CRESTIO	Drag. 31, 29, 37	Bregenz, Günzburg, London, Heddernheim, Holt. (Knorr, <i>Terra Sigillata</i> , 1919, Pl. 28). The decoration of the Holt vessel, Form 37, is of the period Domitian-Trajan.
CRVCVRO	Drag. 33, 18, 31. Knorr 78. Déch. 67	London, Wroxeter, Strasbourg, Rottweil, Carlisle, Corbridge, Newstead I. His activity probably extended into Trajan's reign. (Pl. XIX. 7).
DAGOMARVS	Drag. 27, 33, 18, 31, 42 (bowl with strap handles), 37	London, Wroxeter, Newstead I., Friedberg, Cannstatt.
FRONTINVS	Drag. 27, 33, 18, 31, 29, 37 (?)	London, Aislingen, Rottweil, Carlisle, Corbridge, Newstead I., Heddernheim, Cannstatt, Bregenz "Cellar-Find." (Curle, <i>Newstead</i> , p. 209, Figs. 1 and 4; Knorr, <i>Terra Sigillata</i> , 1919, Pl. 33; and Walters, <i>C.R.P.</i> M 289).
(i) IVLLINVS	Drag. 33, 15/17, 18, 31	Mainz, London, Carlisle, Newstead I., Rottenburg, La Graufesenque (IVLIN). A IVLLINVS worked at Lezoux in the Trajan-Antonine period, and a potter of the same name is assigned to Rheinzabern.
(i) LIBERTVS OF IBERTVS	Drag. 24/25, 27, 33, 29.	London, King William St. (LIBERTVS) Hofheim II. (IBERTVS), Colchester (IBERT), Leicester (IBERTI M), Silchester (IBERTVS), Chester (IBERTVS). These examples probably represent the early plain wares of LIBERTVS of Lezoux ( <i>q.v.</i> ). On the other hand, they may come from the work of a LIBERTVS of La Graufesenque, who made vessels of Form 29 (Knorr, <i>Terra Sigillata</i> , 1919, Pl. 44).
LOGIRNVS	Drag. 27, 18, 18/31, 31	Aislingen, London, Colchester, Wroxeter, York, Carlisle, Corbridge, Montans (mould).
MEDDILLVS	Drag. 27, 33, 29, 37	London, Wroxeter, York, Rottweil, Corbridge, La Graufesenque. The stamp OF MEDD[ occurs in the Wiesbaden O.L. (Pl. IV. 9; Wroxeter II. Pl. XIII. 5; and Knorr, <i>Terra Sigillata</i> , 1919, Pls. 54, 55). His decorated work is of early Flavian or Nero-Vespasian type in most examples.
(i) MERCATO OF MERCATOR	Drag. 27, 33, 18, 31, 29, 37	London, Colchester, Silchester, Rottweil, Friedberg, Corbridge. The stamps OF MERC and MERCATO are the earliest impressions of this potter, and occur on decorated fabric of

POTTERS.	FORMS.	PROVENANCE AND REMARKS.
		South Gaulish character. His activity continued into Trajan's reign. (Pl. XX. 1; and May, <i>Silchester</i> , Pl. XXV. 5-7). He is to be distinguished from the later MERCATOR of Lezoux and Heiligenberg.
NICEPHOR	Drag. 27, 33, 18, 18/31, 31, 42 (bowl with strap handles)	London, Wroxeter, York, Carlisle, Corbridge, Heddernheim.
PONTVS	Drag. 24/25, 27, 33, 16, 15/17, 18, 18/31, 31, 29	London M.S., Colchester, Rome, York, Buxton, Carlisle, Corbridge, Saalburg, Bregenz "Cellar-Find". (Knorr, <i>Aislingen</i> , Pl. VIII. 5; and <i>Victoria County Hist.</i> Derbyshire, i. p. 225, Buxton). He probably commenced work in the reign of Nero.
SABINVS	Ritt. 8. Drag. 24/25, 27, 33, 15/17, 18, 18/31, 31, 29, 37, 42 (bowl with strap handles)	Aislingen, London, Hartlip (C. R. Smith, <i>Collect. Antiq.</i> ii. p. 13), Silchester, Wroxeter, Pompeii, Carlisle, Corbridge, Newstead I., Bregenz "Cellar-Find". (Déchelette, I. Fig. 63; and Knorr, <i>Terra Sigillata</i> , 1919, Pl. 69). A later SABINVS worked at Lezoux, La Madeleine and Rhein-zabern.
SASMONOS	Drag. 33, 29, 37	Pompeii, Rottweil, Margidunum, La Graufesenque. (Knorr, <i>Terra Sigillata</i> , 1919, Pl. 70).
L. TERTIVS SECVNDVS	Drag. 27, 18, 18/31, 31	Wroxeter, Corbridge, Castlecary, Bregenz "Cellar-Find," Heddernheim.

V. POTTERS WHOSE CHIEF ACTIVITY MAY BE ASSIGNED TO  
THE REIGNS OF TRAJAN AND HADRIAN.

POTTERS.	FORMS.	PROVENANCE AND REMARKS.
ALBILLVS	Drag. 27, 18/31, 31, 40, 37	La Madeleine, Heiligenberg, Cannstatt, Corbridge, Heddernheim. (Curle, <i>Terra Sigillata</i> , Fig. 27; our Pl. XVII. 2, style of ALBILLVS).
BIGA	Drag. 27, 33, 18/31, 31, 42 (bowl with strap handles)	Friedberg, Rottweil, Rottenburg, London, York, Wroxeter (in a deposit assigned to the first half of the second century).
BONOXVS	Drag. 27, 18, 31, 42 (bowl with strap handles)	Friedberg, Cannstatt, Corbridge, London, Colchester, Wroxeter (with pottery dated to 90-120 A.D.).
BVTRIO	Drag. 18, 30, 37. Déch. 64, 67, 68	Lezoux, Vichy, Hattenville, Pfünz, London, Corbridge. Activity chiefly in Trajan's reign (Pl. VIII. 5; XII. 2; XX. 4).



POTTERS.	FORMS.	PROVENANCE AND REMARKS.
CARANTINVS	Drag. 27, 33, 18, 31, 30, 37	Lezoux, London, Carnuntum, Kastell Wiesbaden, Corbridge. Decoration chiefly of metope or panel type (Déchelette, I. No. 43).
(ii) CENSORINVS	Drag. 33, 31, 37	Lezoux, London, Chester, Corbridge, Newstead II. Activity chiefly in Hadrian's reign (Fölzer, p. 69, Abb. 5).
(i) CERIALIS	Drag. 27, 18, 18/31, 37	Lezoux, London, Silchester, Colchester, Corbridge. A CERIALIS worked at Bregenz, Heiligenberg and Rheinzabern ( <i>q.v.</i> ).
DIVIXTVS	Drag. 31, 32, 30, 37	Lezoux, London, Silchester, Carlisle, Corbridge, Newstead II. Activity extended into the Antonine period. (Pl. VIII. 7; Curle, <i>Newstead</i> , p. 227, Fig. 5; May, <i>Silchester</i> , Pl. XXVI. 40, 41; Walters, <i>C.R.P.</i> M 1038; <i>Arch. Æl.</i> vol. VIII. Fig. 13).
IANVS	Drag. 37. Knorr 78	La Madeleine, Heiligenberg and Rheinzabern; London, Rottweil, Nether Denton, Cannstatt. His activity was probably prolonged into the Antonine period. (Pl. XIII. 2; <i>Archæologia</i> , vol. 64, Fig. 21; Knorr, <i>Rottenburg</i> , Pl. XI. 1; Pl. XII. 1, 8-10).
LAXTVCISSA	Drag. 33, 31, 37	Lezoux, Silchester, Wroxeter (in a deposit dated to the first half of the second century), Corbridge. (May, <i>Silchester</i> , Pl. XXVI. 58; Wroxeter, Report II. Pl. XIV. 23).
(? ii) LIBERTVS	Drag. 37. Déch. 64, 65, 66, 71	Lezoux, Sèvres, London, Silchester, Wroxeter, Oundle. (Pl. XXI. 5, 7; Pl. XXVI. 14; Curle, <i>Terra Sigillata</i> , Fig. 25). Exportation chiefly to Gaul and Britain. The early plain ware of this potter has already been noted. His activity in decorated ware was chiefly in Trajan's reign.
RANTO	Drag. 29. Knorr 78	Luxeuil (?), Heddernheim (with coins of Domitian and Trajan), Cirencester. (Pl. XXVIII. 12). It is probable that he commenced work in the reign of Domitian.
REGINVS	Drag. 27, 33, 18/31, 32, 37. Ludow. Tc, Tg, Tz	Mandeure, Baden in Aargau, Heiligenberg, Rheinzabern, Newstead II. The early work of this potter has been found in a Rheinzabern grave in association with Déch. Form 67, and dated about 100 A.D. (Oelmann, <i>Niederbieber</i> , p. 23). His later work is represented at Newstead II. and

POTTERS.	FORMS.	PROVENANCE AND REMARKS.
		Niederbieber. (Pl. XII. 6; Knorr, <i>Cannstatt</i> , Pl. XXXV. 2, 5, 8, 9).
SATTO	Drag. 27, 33, 18, 31, 29, 37	La Graufesenque and East Gaul; Gnotzheim, Saalburg (ditch of the earth-fort), Heddernheim (Trajanic cemetery), Cannstatt (with stamp of LVTAEVVS), London, Colchester, Corbridge. The work of SATTO's <i>officina</i> probably lasted from late in the first century to about the end of Hadrian's reign. (Pl. XX. 3; XVII. 4; Knorr, <i>Cannstatt</i> , Pls. I. II. III.).
TALVSSA	Drag. 33, 18/31. Déch. 67	Lezoux, Margidunum (in deposit of late first and early second century), Strasbourg.
VIDVCOS or VIDVCVS	Drag. 27, 33, 18, 18/31	South Gaul, Lavoye, Heiligenberg and Rhein Zabern; London, Colchester, Corbridge, Rottweil, Heddernheim.

VI. POTTERS WHOSE CHIEF ACTIVITY MAY BE ASSIGNED TO  
THE HADRIAN-ANTONINE PERIOD.

POTTERS.	FORMS.	PROVENANCE AND REMARKS.
ADVOCISVS	Drag. 33, 31, 38, 37. Walters 79, 80. Ludow. Tf'	Lezoux, Newstead II. Distribution chiefly to Gaul and Britain. (May, <i>Silchester</i> , Pl. XXVI. 54; Corbridge, <i>Arch. Æl.</i> vol. viii. Fig. 13).
ALBVCIVS	Drag. 33, 18/31, 31, 38, 30, 37. Wal- ters 79, 80	Lezoux. Distribution chiefly to Gaul and Britain. (May, <i>Silchester</i> , Pl. XVI. Pl. XXVII. 68).
ATILIANVS	Drag. 33, 18/31, 31, 32. Walters 79	Lezoux; Pan Rock. Distribution almost exclusively to Gaul and Britain.
AVENTINVS	Drag. 27, 33, 31, 32, 37	Lezoux; Newstead II. (Curle, <i>Newstead</i> , p. 227, 3, Hadrianic style). This stamp occurs on the Rhine and Danube frontiers, e.g. Zugmantel, Pfünz, Carnuntum; but the distribution was chiefly to Gaul and Britain.
(ii) AVITVS	Drag. 33, 31, 32, 38, 37. Ludow. Sa, Tc, Tr	Ittenweiler and Rhein Zabern; Newstead II. Common on the Rhine and Danube frontiers and not infrequent in Britain.
AVITI F and L.A.A. L.A.L.	Drag. 37 - -	Eschweilerhof. Distribution almost exclusively German, but occasionally found on British sites, e.g. L.A.L. at York and Wilderspool. Antonine period (Pl. XVII. 7).
BELLINICCVS or BELINICVS	Drag. 27, 33, 31, 38. Walters 79	Lezoux; Newstead II. Distribution chiefly to Gaul and Britain, but also on the Rhine and Danube frontiers, e.g. Saalburg, Pfünz.

POTTERS.	FORMS.	PROVENANCE AND REMARKS.
BORILLVS	Drag. 27, 33, 31, 37	Lezoux; Newstead II. Distribution chiefly to Gaul and Britain, but also on the Rhine and Danube frontiers, <i>e.g.</i> Saalburg, Cannstatt, Carnuntum. Decorative work in panel and free-style (Déch., i. No. 36).
CALETVS	Drag. 33, 31, 38, 37	Lezoux; Pan Rock. Distribution almost exclusively to Gaul and Britain (May, <i>Silchester</i> , Pl. XXVII. 76).
CATIANVS	Drag. 27, 33, 32. Walters 80. Ludow. Tg	Lezoux; Pan Rock. Distribution almost exclusively to Gaul and Britain.
(ii) CERIALIS	Drag. 31, 37	Rheinzabern. Distribution chiefly to Rhine and Danube frontiers. (Walters, <i>C.R.P.</i> Pl. XIII.; Knorr, <i>Rottenburg</i> , Pl. XVII. 1, 3, 6). His work occurs conjointly with the stamp CONSTAENI. See his moulds, Form 37, used by STABILIS, VITALIS and COMITALIS.
CIBISVS	Drag. 32, 37. Ludow. Tb	Heiligenberg and Ittenweiler. Distribution chiefly to Rhine and Danube frontiers. (Pl. XIII. 5; Knorr, <i>Rottweil</i> , 1907, Pl. XXI. 1, 2, and Pl. XXII. 1).
CINNAMVS	Drag. 27, 33, 31, 30, 37. Walters 80	Lezoux; Newstead II. Distribution chiefly to Gaul and Britain, but occasionally found in Rhine and Danube districts, <i>e.g.</i> Carnuntum, etc. (Pl. XII. 3, 4). In the examples found in Britain his decoration is typically Antonine.
CIRIVNA	Drag. 33, 31, 32, 37	Heiligenberg; sites on the Rhine and Danube frontiers, <i>e.g.</i> Osterburken on the Outer Limes (first occupied c. 140/150 A.D.). His decoration is of Hadrian-Antonine type (Pl. XIII. 1).
(ii) COBNERTVS	Drag. 31, 37	Rheinzabern. Distribution chiefly to Germany and Britain. (Corbridge, <i>Arch. Ael.</i> vol. viii. Fig. 13; Knorr, <i>Rottweil</i> , 1907, Pl. XXVII. 12; Knorr, <i>Rottenburg</i> , Pl. XVI. 15; Knorr, <i>Cannstatt</i> , Pl. XXIV. 1, 2).
DOECCVS α D	Drag. 33, 31, 38, 32, 30, 37, 56. Wal- ters 79	Lezoux, Lubié. Distribution chiefly to Gaul and Britain, but the full stamp occurs at Heddernheim, Saalburg and Zugmantel. His decoration is of the Hadrian-Antonine period (Walters, <i>C.R.P.</i> M 1031; May, <i>Silchester</i> , Pl. XXVI. 44, 46, 48; May, <i>York</i> , Pl. VII. 2). A potter



POTTERS.	FORMS.	PROVENANCE AND REMARKS.
		who made use of a small monogram, α D scattered about the field, worked at Blickweiler in Hadrian's reign (Atkinson, <i>Lowbury Hill</i> , p. 58).
(i) FIRMVS	Drag. 33, 31, 32, 37	Heiligenberg, Rheinzabern, Newstead II. Distribution chiefly to Rhine sites, but occasionally to Britain. (Knorr, <i>Rottweil</i> , 1907, Pl. XXVIII. 1, 2, 3, 5). His stamp is found on the Outer Limes, <i>e.g.</i> at Miltenberg and Oehringen.
MAIOR	Drag. 33, 31 - -	Pan Rock, Outer Limes ( <i>e.g.</i> Oehringen). Common in Britain and not infrequent both in Gaul and Germany.
MVXTVLLVS	Drag. 33, 31, 38, 44	Lezoux; Pan Rock. Distribution almost exclusively to Gaul and Britain.
(i) PATERNVS	Drag. 27, 33, 18/31, 31, 30, 37. Walters 81	Lezoux. Distribution chiefly to Gaul and Britain. His decoration is chiefly of the Antonine period (Pl. XII. 1, and Déchelette, i. Figs. 120, 121); but an early 37 (PATERNI M) of Trajan-Hadrianic type occurs in the Shrewsbury Museum. He is to be distinguished from the PATERNVS of Rheinzabern.
(ii) PAVLLVS	Drag. 33, 32, 44, 37. Walters 79, 80	Lezoux; Pan Rock. Distribution chiefly to Gaul and Britain. His decoration is of the Antonine period (see example in Leicester Museum)
(ii) QVINTVS	Drag. 33, 31. Walters 79	Lezoux and East Gaul; Colchester (a fragment of the Hadrian-Antonine period), Newstead II., Pan Rock, Niederbieber. Distribution to Gaul, Britain and Rhine sites. He is to be distinguished from QVINTVS of La Graufesenque.
REGALIS	Drag. 33, 31, 32, 40. Walters 79	Rheinzabern, Newstead II., Outer Limes ( <i>e.g.</i> Miltenberg, Walldürn). Distribution chiefly to Rhine sites and Britain.
VICTORINVS	Drag. 31, 36, 39, 40, 32, 37. Ludow. Sc, Tb, Ti, Tr, Tv	Rheinzabern; Niederbieber. Distribution chiefly to Rhine districts and Britain, but decorated wares with this stamp have been found at Orléans and Rouen. (Oelmann, <i>Niederbieber</i> , Pl. VIII. 31).

VII. POTTERS WHO WERE ACTIVE IN THE ANTONINE PERIOD  
AND THE BEGINNING OF THE THIRD CENTURY.

POTTERS.	FORMS.	PROVENANCE AND REMARKS.
ALPINIVS	Drag. 31, 32, 37	- Trèves; Dalheim. Decorated ware in the style of ALPINIVS at Niederbieber (Oelmann, <i>Niederbieber</i> , Pl. VII. 4, 9-12, 16, 22). Distribution almost entirely to Rhine districts. (Pl. XVIII. 5).
Q. ALPINIVS		
(iii) CENSOR	Drag. 33, 31, 32, 37	Trèves; Niederbieber. Distribution to Rhine districts and to Britain. (Pl. XVIII. 2; Walters, <i>C.R.P.</i> M 1246, M 2279; Fölzer, Pl. XVI. 2, 5, 12; Oelmann, <i>Niederbieber</i> , Pl. VI. 5).
COMITALIS	Drag. 31, 32, 30, 37	Rheinzabern; Niederbieber. Distribution chiefly to districts of the Rhine and Danube, but occasionally found in Britain. (Pl. XIII. 4; Knorr, <i>Cannstatt</i> , Pl. XXV. 1-4, 6; Oelmann, <i>Niederbieber</i> , Pl. VIII. 30, 32).
(ii) CRICIRO	Drag. 32, 37	Trèves; Niederbieber, Silchester. (Pl. XVIII. 7; May, <i>Silchester</i> , Pl. XXVII. 84; Oelmann, <i>Niederbieber</i> , Pl. VI. 21). He is to be distinguished from CRICIRO of Banassac.
DEXTER	Drag. 37, 31	- - Trèves; Niederbieber and other Rhine sites. (Pl. XVIII. 3; Fölzer, Pl. XV. 7, etc.). The stamp DEXTER F occurs at Silchester (Form 31) and Chesterford.
(ii) IVLIVS	Drag. 31, 32, 38, 51, 37. Ludow. Tb	Rheinzabern. Distribution chiefly to Rhine districts, <i>e.g.</i> Zugmantel, the forts of the Outer Limes (Osterburken) and also to the Danube frontier, <i>e.g.</i> Carnuntum, Faimingen and Pfünz. Occasionally found in Britain, <i>e.g.</i> at Corbridge. This stamp occurs at Niederbieber. (Curle, <i>Terra Sigillata</i> , Fig. 39; and our Pl. XXIX. 10).
MAIIAAVS	Drag. 31, 32, 37.	Trèves; Niederbieber and other Rhine sites. (Oelmann, <i>Niederbieber</i> , Pl. VIII. 14).
TORDILO	Drag. 31, 32, 37.	Trèves; Niederbieber and other Rhine sites; London (Guildhall). (Pl. XVIII. 4).

## CHAPTER V

### VESSELS DECORATED IN MOULDED RELIEF

THE division of the forms or shapes of Sigillata vessels into the categories of decorated and plain (Chapter VIII.), although not strictly accurate, has been adopted in this work as a convenient one for purposes of description.

Each vessel is described under the *type* or *form* number which has been assigned to it by various investigators, such as Curle, Déchelette, Dragendorff, Hähnle, Knorr, Loeschke, Ludowici, Ritterling and Walters.

Except in the case of the sub-group entitled "Sigillata Vessels of Mortarium Type," an endeavour has been made to arrange them in the order of their first appearance, but owing to the long life of certain forms and the frequent continuity in development of many types an accurate chronological sequence is not attainable.

#### DRAGENDORFF FORM II.

##### THE PEDESTALLED DECORATED BOWL OR CRATER.

It has already been pointed out (Chapter II.) that three types of crater were produced in the Augustan epoch by Italian potters, viz. Type A or Dragendorff's Form II (Pl. II. 3), which was subsequently copied directly by the Gaulish potters; Type B, the Foxton form (Pl. II. 1, 2, 4), and Type C (Pl. XXVI. 1, 2), from both of which vessels many elements of detail were handed down to the new Gaulish form, Dragendorff 29.

The first type (A) was copied by the early potters of La Graufesenque (Pl. XIX. 1 VOLVS; Pl. XXI. 1, Hofheim I.; Pl. XXIX. 7, Neuss) and also (according to Déchelette, i. p. 149) by those of Lezoux.

This bowl is rarely found in Britain, but occurs at Colchester (Walters, *C.R.P.* M1001) and London (G.H.). At Hofheim it occurs exclusively in the Claudian period. It is absent from Flavian sites, such as the second occupation of Hofheim, the first period at Newstead and Rottweil.

Among its distinguishing features attention may be drawn to the hollow footstand supporting the campanulate body which terminates in a well-defined, everted lip. The upper portion of the wall is plain, and is delimited



from the lower and decorated part by a double fluting. The lip is practically triangular in section, and is profiled by several ridges with intervening grooves. The greater portion of the body is decorated, the design being bounded above by an ovolo *motif* and below by wide shallow flutings, which, it should be noted, also occur on Form 29.

The base is sometimes encircled internally by fine, duplicated rings, and is unstamped. Occasionally, however, the potter's mark occurs in the midst of the decoration.

The ornamental *motifs* comprise leaf-garlands recalling those of Arretine ware (Pl. XIX. 1), festoons (Pl. XXI. 1), scrolls (Pl. XXIX. 7) and metope-decoration in which the St. Andrew's Cross is sometimes included (Pl. IX. Fig. 3). Occasionally the ornament is divided into two zones by a straight wreath or other *motif* (Pl. XIX. 1, the VOLVS crater)—a technique probably prompted by the central moulding of the Italian crater Type B (which immediately preceded it in point of time) and of the contemporary Form 29. Animal figures, such as the sitting hare, birds, lions and dogs, are occasionally represented, whilst the human figure (Déch. 536) occurs on the VOLVS bowl.

In general, it may be stated that the decoration found on Form 11 is of a more advanced type than that which occurs on the earliest examples of Form 29.

An interesting series of this vessel, dating back to the Tiberian period, was found at Bregenz in 1913, and is illustrated by Knorr (*Terra Sigillata*, 1919, Pl. 1, C; Pl. 2, D, E, F, J; Pl. 3, M, N, O, P). Elegant winding scrolls predominate, and the ovolo displays a distinct resemblance to that found on Italian Sigillata.

### DRAGENDORFF FORM 29.

#### THE CARINATED DECORATED BOWL.

(1) *The distinguishing feature* of this bowl is not merely the carination (more pronounced indeed in the later than in the earlier examples), but the central moulding, which divides the external surface into two decorated friezes or zones—an upper and a lower. This moulding is usually bordered above and below by a row of beads. Furthermore, a row of beads almost invariably marks the upper limit of the upper frieze.

The rim also presents special characteristics: it is composed of a rounded lip surmounting two rouletted mouldings. Rouletting may indeed be absent from the inferior moulding, and this is frequently noticeable in bowls of the Flavian period. Very occasionally only one of these two mouldings is present in the rim, as in some early specimens, such as the bowls by SCOTTIVS and another potter of the same period (Pl. III. 6, 7).<sup>1</sup>

The base of the footstand almost invariably possesses a central circular

<sup>1</sup> See also the bowl by VITLVS (Pl. XXVI. 3).

groove (Pl. III. 1, 2, 3); and there is usually a slight "step" where the footstand joins the actual base of the vessel, thus forming a wide and shallow vaulting on the inferior and external surface of the base (Pl. III. 1-3).

(2) *Period.* For all practical purposes the carinated bowl may be regarded as characteristic of the first century. Occasionally Form 29 was produced at the close of the first century or even early in the second century by East Gaulish potters, influenced by their predecessors in South and Central Gaul, e.g. by SATTO (Fölzer, Pl. VI. 4, Gnotzheim and Pfünz) and by RANTO (Pl. XXVIII. 12 Heddernheim). The hybrid form 29/37 (Pl. XII. 5) was made by both Central and East Gaulish potters at about the junction of the first and second centuries, and is occasionally found in Britain, e.g. at Leicester, Corbridge and Nether Denton.<sup>1</sup> It should, however, not be confounded with the true form.

(3) *Form and Development.* The earlier bowls, especially those of the Tiberian period (Pl. III. 1), are almost hemispherical in contour—in marked contrast to the later bowls—and their rim is short, upright and even displays a slight tendency to curve over inwardly (Pl. III. 4-8). They are relatively shallow in comparison with Flavian examples.

It is difficult to trace the definite development of this form from any specific Italian prototype owing to the fact that intermediate stages have not yet been discovered,<sup>2</sup> but it seems probable that, during the course of its evolution, both its contour and its decoration were influenced by more than one Augustan or even contemporary type, both in pottery and metal.

To the Augustan crater, Type B (Pl. II. 1, 2, 4), it owes its central moulding, the division of its surface into two friezes, the rouletting of its rim,<sup>3</sup> and (in the earlier bowls) some of its detail decoration. Thus it will be readily observed that the technique of rouletting the central moulding, as present in the ATEIVS craters, Type B (Pl. II. 1, 2, 4), was adopted by Tiberian potters, such as SENICIO and SCOTTIVS, and also occurs on the equally early bowl from Strasbourg (Pl. III. 5-7). In Fig. 7 the decoration itself is obviously influenced by that of some Augustan craters, Type B, for the continuous winding scroll is found on the upper frieze of the ATEIVS crater as well as of the Strasbourg bowl (Pl. III. 7). Similarly, the "fern-frond" or "nautilus" motif on the lower frieze of the ATEIVS crater from Foxton (Pl. II. 2) is very closely reproduced in the Strasbourg bowl (Pl. III. 7).

<sup>1</sup> *Arch. Aeliana*, 2nd ser. ix. p. 280, Fig. 24; Knorr, *Rottenburg*, viii. 7, 8; Haverfield, *Proc. Soc. Antiq.* 2nd ser. xxiv. p. 35; for Lezoux, see Déchelette, i. Figs. 101, 108.

<sup>2</sup> Attention is drawn to the fact that although two main types of crater were produced in the Augustan period many intermediate variants occur (Haltern, Hahnle's types C and D, our type C, Pl. XXVI. 1, 2), and it is possible that some as yet undis-

covered variant may approximate more nearly to the Gaulish form than any known at present; thus a fragment of an upper frieze by SATVRNIVS (Pl. XXIV. 4), slave of M. PERENNIVS, is strongly suggestive of the Gaulish Form 29.

<sup>3</sup> Similar rouletting both of the rim and of the junction of the base and wall is found in the Augustan plain form, Loeschke Type 15B (Pl. XXXIX. 2).



It should be noted that in all these early bowls the footstand possesses a greater diameter, relatively to the size of the vessel, than in the later examples.

The above characteristics are well exemplified in the bowls by BILICATVS, SENICIO and SCOTTIVS (Pl. III. 4-6).

Concomitantly with the disappearance of Arretine influence, the bowl becomes more and more definitely carinated, whilst the rim at the same time increases in depth and shows a decided eversion. The influence of carinated metal vessels, such as those found at Bosco Reale and Hildesheim (Pl. XXII. 4, 5), must not be overlooked. But on the whole this development appears to have been inspired by certain Gaulish forms, for the shape now approximates more closely to a late-Celtic or La Tène type frequently found at Mont Beuvray (Pl. XXIII. 9, 10). Its contemporary development in Belgic plain forms is figured in Plate XXIII. 6, 7, and the carination of the antecedent ACO bowl is illustrated in Plate XXIII. 8.

It is therefore probable that Form 29, in its later development, reflects to some extent the interaction of native or indigenous ceramic technique upon forms derived originally from Italy. Its fully developed contour is exhibited by a Flavian bowl of the potter IVCVNDVS (Pl. III. 3).

Even in the Claudian period of Hofheim the majority of these bowls already shows an increase in the degree of carination as well as in the height of the rim. The greater height of the later rims is almost invariably obtained by an increase in the width of the upper of the two rouletted mouldings.

This gradual evolution will be more fully appreciated by comparing the rims of bowls of the Tiberian, Claudian and Flavian periods respectively (Pl. III. 1-3).

The base of the lower decorated frieze is usually delimited by one or two horizontal flutings or girth-grooves, shown in section on Plate III. 2, 3, and also indicated in Figs. 8 and 9 of the same plate and in all the bowls illustrated on Plate IV.

(4) *Internal Features.* The interior of the bowl is invariably characterized by two minute horizontal girth-grooves, the level of which corresponds approximately with the upper and lower margins of the superior rouletted rim-moulding. The upper of these grooves is furthermore distinguished by a slight angle or projection (Pl. III. 1-3).

(5) *Decoration in Zones.* The conformation of this shape of bowl naturally lends itself to decoration in two friezes—an upper and a lower. This practice, with few exceptions, obtains in the earliest examples (Pl. III. 4-6, 8, 9), and is also of frequent occurrence in vessels of the Flavian period.

A third (or central) ornamental zone was, however, occasionally added, at least as early as the reign of Claudius, e.g. on bowls by ALBINVS (Knorr, *Terra Sigillata*, 1919, Pl. 1B) and by LICINVS (Pl. IV. 4) from Hofheim I.



(i) *DECORATION OF THE CENTRAL ZONE.*

This central zone was placed immediately beneath the central moulding so as to be situated upon the angular carination of the vessel, thus emphasizing this part of its contour. The decoration of this additional zone took the form either of a narrow straight wreath, rows of imbricated leaves, or of "arrowheads," or of the godroon *motif* in its varieties of "elongated tongue," oval, s-shaped and lozenge patterns (Pl. IV. 1, 2, 4, 6, 9, 10; Pl. V. 1, 2, 7; Pl. VI. 5).

The potters who adopted this additional central zone range from the time of Claudius to the reign of Domitian; amongst them may be mentioned AQTIVANVS, BASSVS and COELVS, CARVS, CENSOR, LABIO, LICINVS, MEDDILLVS, MELVS, PASSENVS, RVFINVS, SABINVS and SEVERVS.

In the Flavian period it was comparatively frequent, as evidenced by bowls found at Rottweil, Pompeii and Newstead.<sup>1</sup> This central decorative zone was widely adopted in the ornamentation of the transitional or Flavian examples of Form 37 (Pl. XIV. 1, 6, 7).<sup>2</sup>

(ii) *DECORATION OF THE UPPER FRIEZE.*

The following are the main decorative types occurring on this zone:

- (a) A continuous winding scroll, without figures; and
- (b) A broad, straight wreath, without figures.

Both these *motifs* are early in date, and either one or the other is found on bowls which can be definitely assigned to the Tiberio-Claudian period, such as the products of the potters BILICATVS, SENICIO, SCOTTIVS and AQTIVANVS (Pl. III. 4-7, 9).

The winding scroll of the typically Tiberian period is furnished with bifid leaflets (Pl. III. 4, OFIC BILICATI) or with very short tendrils or stalks and leaves (Pl. III. 7). With the advent of the Claudian period the tendril becomes longer (Pl. III. 9).

During the early occupation of Hofheim the continuous winding scroll is the most common ornament of the upper frieze, but both the simple scroll and the straight wreath persisted into the Flavian period. Although in this period the winding scroll is relatively less common, it is not infrequent, whilst the straight wreath is rare. Examples of both types of decoration, taken from the Flavian occupations of Pompeii, Rottweil and Newstead, are illustrated by vessels of SEVERVS, VITALIS and RVFINVS (Pl. IV. 6; Pl. V. 4, 7; and Pl. VI. 9).

<sup>1</sup> Knorr, *Rottweil*, 1912, i. 2, 5, 7, 8, 11, 13; ii. 2, 4-6, 9-11, etc.; Atkinson, *Journ. Roman Studies*, 2-4, 6, 33, 35, 36; and Curle, *Newstead*, p. 205, 1-3; p. 211, 2; p. 215, 3.

<sup>2</sup> Other examples are given by Atkinson, *op. cit.* 38, 41-45, 47, 49, 52; Knorr, *Rottweil*, 1912, xviii. 2, 7; xx. 1, and Curle, *op. cit.* p. 211, 5.

In the Claudian and Neronian periods the lower concavities of the winding scroll are sometimes occupied by a series of imbricated pinnate leaves of the type illustrated on Plate IV. 4, and Plate V. 3, 10, in the work of the potters LICINVS and ARDACVS.<sup>1</sup>

A somewhat later period may be assigned to the *motifs* of the cordate leaf on a bowl by VITALIS (Pl. IV. 7) and of the six-bladed leaf on a fragment from Margidunum (Pl. V. 6), and on a pre-Flavian bowl by PRIMVS at London (Guildhall Mus.).

The commonest infilling of the lower concavities is, however, the so-called "arrowhead," and this is especially characteristic of the Flavian period.<sup>2</sup> It is possibly a conventionalized derivative of a plant-form, such as the pinnate leaf already mentioned, but it also presents much similarity to the inverted lotus-bud and lotus flower of Egyptian decorative art (Pl. XXX. 1-3). The bowl by CARILLVS (Pl. V. 8) furnishes a good example of this mode of decoration; and another typical instance is present in a bowl by MOMMO from Pompeii.<sup>3</sup>

(c) A continuous winding scroll with figures.

Sporadically, the figures of birds or small animals may occur in the concavities of the winding scroll on bowls of Tiberian or Claudian types (Pl. XXVI. 6, ACVTI M; Pl. XXVIII. 3; Knorr, *Aislingen*, Pl. III. 11). In the Flavian period birds and animals are more frequently met with (see examples at Rottweil, Knorr, *Rottweil* (1912), Pls. VI. 11, VII. 3, 4, X. 3, 7, 8; and our Pl. XXVI. 11); but the occurrence of animal-figures in the concavities of the scroll is more usual in the lower than in the upper frieze.

(d) Semicircular garlands or festoons, enclosing either a rosette or a leaf, occur as early as the reign of Claudius,<sup>4</sup> and are even found on the early and short-lived South Gaulish crater.<sup>5</sup> They are not infrequent on Arretine ware (Pls. II. 5, XXVI. 2).

The festoon may be either continuous or interrupted, as in the bowl by GERMANVS (Pl. IV. 8) and in the specimen from Torre Annunziata (Pl. IV. 10). Such interruptions occurred even in the reign of Claudius, when the intervening space may be occupied by a medallion enclosing the figure of a bird, as on a bowl from Hofheim (Ritterling, *op. cit.* Pl. XXIV. 2).

An infilling of the festoons and of the intervening spaces with animals or human figures is, however, more particularly characteristic of the Flavian

<sup>1</sup> The imbricated pinnate leaf is occasionally met with in the Flavian period (Knorr, *Terra Sigillata*, 1919, Pl. 23B, COELVS).

<sup>2</sup> This *motif* can be traced back to both the Tiberio-Claudian and the Claudio-Neronian periods (Knorr, *Terra Sigillata*, 1919, Pl. 76E SENICIO, Pl. 79A STABILIO, Pl. 20F CARVS, Pl. 30C DARIBITVS, Pl. 60A NAMVS).

<sup>3</sup> Atkinson, *op. cit.* Fig. 22.

<sup>4</sup> Ritterling, *Hofheim*, XXIV. 2; and our Plate VI. 1.

<sup>5</sup> Ritterling, *op. cit.* Abb. 47; and our Plates XIX. 1, and XXI. 1.

period, as in the bowls by GERMANVS and RVFINVS from Strasbourg and Pompeii respectively (Pl. IV. 8 and Pl. V. 11), and in the unstamped vessel from Torre Annunziata (Pl. IV. 10).

(e) Panel (or "metope") decoration, that is to say, the division of the upper frieze into metope-like compartments by means of bead rows or wavy lines, is found on very early fragments, as in examples from the Wiesbaden "*Moorschicht*." It is a not uncommon mode of decoration in vessels of the reign of Nero, but is more especially characteristic of the Flavian period. The continuity in time of this *motif* is demonstrated by its occurrence, not only in the Claudian period at Hofheim, but in the Flavian era at Pompeii, Rottweil and Newstead, and also by its association with the work of the following potters: ARDACVS (Pl. V. 3), BASSVS and COELVS (Pl. IV. 1), CELADVS, FELIX, PASSENVS (Pl. IV. 2, 3), MOMMO (Pl. V. 5), MEDDILLVS (Pl. IV. 9) and RVFINVS (Pl. V. 11).

The panels contain the following designs:

(1) Pinnate leaves (Claudius-Nero Type) or "arrowheads" (Flavian Type) arranged either vertically or horizontally, together with medallions containing rosettes or the figure of an animal or bird, as in the bowls by ARDACVS and PASSENVS (Pl. V. 3; Pl. IV. 2). "Arrowheads," alternating with figure-subjects, are frequent in the Flavian period, as in the bowls by PASSENVS, MEDDILLVS and MOMMO (Pl. IV. 3, 9; Pl. V. 5). In the later bowls oblique wavy lines are frequently associated with groups of arrowheads (Pl. IV. 9, 10; Pl. V. 11).

The "arrowhead" *motif*, whether as an infilling to the concavities of the winding scroll, or as part of a scheme of panel-decoration, was extensively adopted in the decoration of early or Flavian vessels of Form 37 (see Atkinson for Pompeii, Knorr for Rottweil, and Curle for Newstead).

(2) Vertical bead rows, poppy heads or pomegranates, with running animals, are found in some early examples, e.g. at Hofheim (Ritterling, *op. cit.* Pl. XXV. 2; Pl. XXIII. 1).

(3) A centrally constricted or doubly-fan-tailed plant with rosettes occurs rather early, as in the bowl by BASSVS and COELVS (Pl. IV. 1). It persisted down to the reign of Domitian in a modified form (Curle, p. 215, 2, and cf. Pl. VI. 11).

(4) Interrupted (discontinuous) festoons with medallions, animals and "arrowheads." The first combination occurs as early as the Claudian period at Hofheim (Pl. VI. 1). The two latter combinations belong more especially to the Flavian period, as evidenced by the bowls of GERMANVS and RVFINVS and the unstamped vessel from Torre Annunziata (Pl. IV. 8; Pl. V. 11; Pl. IV. 10). The reader is referred to Curle's *Newstead* (p. 205, 1, 2) for examples of panel-decoration of the upper frieze attributable to the reign of Domitian (Pl. VI. 5).



(f) *Miscellaneous*. Occasionally, and more especially in the earlier vessels, a discontinuous leaf ornament of naturalistic design is repeated in series, as in the bowl by CATLVS (Pl. III. 8); or else we may find a conventional representation of the palmette (Pl. V. 10) or even merely intersecting circles (Déchelette, *op. cit.* 1. fig. 106; Walters, *C.R.P.* M 1014), or a conventional four-leaved rosette-ornament (Pl. VI. 2, BASSI OF).

Rarely, a repeated series of arcades, filled in with animal, bird or conventional plant-forms, occurs, as at Silchester (May, *Silchester*, Pl. XI. 25). This *motif* is also found on the lower frieze of the early potters BALVVS (Knorr, *Aislingen*, Pl. III. 16) and MACCARVS (Knorr, *Terra Sigillata*, 1919, Pl. 51, 1).

### (iii) DECORATION OF THE LOWER FRIEZE.

The lower frieze of Form 29 presents most of the types of decoration already described, together with some modifications and some additional *motifs*, e.g.:

(a) Vertical palmette-like plants, united below by intersecting arcs, as in the bowl by SENICIO (Pl. III. 5). This *motif* is confined almost wholly to the oldest vessels. It is present, however, in a modified form on a bowl by VITALIS found at Pompeii (Atkinson, *op. cit.* 30). Its prototype occurs on Puteolan ware (Pl. XXIV. 10).

(b) The "Nautilus" *motif*—a plant-like form, circinate like a fern-frond in bud, displaying a gentle ogee curve, swelling out at its incurved apex. It occurs in a repetition series round the base of the bowl, often with a stalk at its base to which a floral ornament (e.g. an acorn) or a rosette is generally attached (Pl. III. 7).

This *motif* is a direct copy of an Arretine prototype, and is almost wholly confined to the oldest bowls of Form 29. For purposes of description it may be termed the "nautilus" or "fern-frond" ornament, for it is probably a conventionalised representation of the tentacles of the Paper Nautilus or Argonaut originating in the naturalistic designs of Minoan pottery. It certainly persisted down to the reign of Nero at least, as evidenced by a bowl of VITALIS (Pl. IV. 7). It may be noted, in passing, that this potter continued the technique of the older traditions, both in the excellence of his work and in the character of his modes of decoration. It occurs also in the work of ALBINVS, AQVITANVS, CANTVS, DARRA, LICINVS, PRIMVS, STABILIO, VOLVS and VRVOED.

(c) The godroon or elongated tongue is derived from beaten metal-work, and is obviously an early *motif*, since it occurs on bowls by BILICATVS and SCOTTIVS (Pl. III. 4, 6). It is plentiful in the Claudian period of Hofheim and in the earlier occupation of Aislingen, whilst the "finds" at Pompeii and Rottweil indicate its frequency even in the reign of Vespasian. At

Pompeii it is associated with the potters MOMMO and VITALIS (Pl. V. 4, 5), both of whom probably ceased working in the mid-Flavian period after a long period of activity.

This *motif* was only very exceptionally transferred to Flavian examples of Form 37—a striking point of difference to the ready transference of many *motifs*, such as “arrowheads,” from Form 29 to Form 37. The godroon is indeed of infrequent occurrence on sites which can be definitely referred to the reign of Domitian, such as Newstead, where only one piece has been figured by Curle (p. 205, 7). Bushe-Fox, however, illustrates three fragments with this *motif* from Corbridge (*Arch.* 64, 27, 29, 30).

It is a distinguishing feature of the older vessels that when they exhibit the elongated tongue, it is broader and fuller than on vessels of the Vespasian period.

Occasionally it is bordered on its lower edge by a straight wreath (*vide infra*, Section IV.), as in a Claudian bowl by ARDACVS (Pl. V. 3), but this arrangement occurs more frequently in the Vespasian period (Atkinson, *op. cit.* 22, 29, at Pompeii; Knorr, *Rottweil*, 1912, Pl. V. 4-6, 8-11).

In a reduced and stunted form it is not uncommon as a decorative *motif* of the central zone, already described (p. 69), of Form 29, particularly in the Flavian period, *e.g.* in bowls by MEDDILLVS and VIRILIS (Pl. IV. 9; V. 2).

(d) The continuous winding scroll, without figures, is one of the commonest decorative *motifs* of the lower frieze, and dates from the earliest period of Form 29, *e.g.* in the work of SCOTTIVS and STABILIO (Knorr, *Terra Sigillata*, 1919, Pl. 71B, 79B), down to at least the reign of Vespasian (Pl. V. 9).

It is frequent in the Claudian period at Hofheim (bowl by LICINVS, Pl. IV. 4) and in the Claudius-Nero legionary camp at Xanten; whilst at Pompeii it is found on a bowl of the earlier type by VITALIS (Pl. V. 9). It occurs also at Carlisle (Bushe-Fox, *Arch.* 64, 2), and may therefore be dated down to late Vespasian or early Domitian times.

In the Flavian period, and sometimes even earlier, the lower concavities of the scroll are frequently occupied by a conventionalised upright plant, as in a bowl by CRESTVS from Carlisle (Pl. VI. 3, and Bushe-Fox, *Arch.* 64, 8), and in the examples of the work of the potters MOMMO and PATRICIVS found at Pompeii (Atkinson, *op. cit.* 16, 34). Other good instances of this technique are shown in bowls by PRIMVS (Pl. IV. 5) from Hofheim, by CARILLVS from Strasbourg and in the example from Torre Annunziata (Pl. IV. 10).

(e) The continuous winding scroll, with figures.

As in the case of the upper frieze, so also in that of the lower frieze, bird and animal figures are associated with the winding scroll at an early date (Knorr, *Terra Sigillata*, 1919, Pl. 14A, BILICAT sitting hare; Pl. 11A, BALBVS F dove; Pl. 31E, DARIBITVS eagle).

Figure-subjects are not, however, frequent in Claudian times, as is demonstrated by their absence from this situation at Hofheim.



Figures enclosed in a medallion, forming a definite infilling of the cavity of the scroll, occur as early as the reign of Claudius (Knorr, *Aislingen*, Pl. V. 1, GALLICANI) and also in the Nero-Vespasian period (Knorr, *Aislingen*, Pl. IV. 3, OF MATV). They are, however, more common in the definitely Flavian epoch, as at Pompeii (Déch., i. Fig. 63, SABINVS; Fig. 66, PAVLLVS), Rottweil (Knorr, 1912, Pl. IV. 3, VIII. 3) and Mengen (Knorr, *Aislingen*, Pl. VIII. 6, OF CALVI. See also our Pl. VI. 12).

Unenclosed figures are also frequent in this period, when the increasing incidence of the human figure should also be noted. Good examples are to be found at Newstead (Curle, p. 215, Fig. 3), Pompeii (Atkinson, *Pompeii*, Fig. 17, MOMMO) and Rottweil (Knorr, 1912, Pl. III. 1, 6; Pl. IV. 2, 4, 5, 8, Dancing pan; Pl. XI. 2, Gladiators, 3; see also our Pl. XXVI. 12). The scroll with unenclosed figures is not uncommon in Flavian examples of Form 37, as at Newstead (Pl. XIV. 2), Pompeii (Pl. XIV. 7) and Margidunum (Pls. XIV. 4; XV. 2).

(f) Festoon decoration on the lower frieze possesses very much the same chronological significance as when it occurs on the upper frieze (p. 70). It is present on the lower frieze of a Tiberian bowl 29 by VITLVS, found at Silchester (Pl. XXVI. 3), and of a Tiberio-Claudian bowl at Jort (Pl. XXVIII. 16), and in the form of an alternating festoon and St. Andrew's Cross in a vessel by SENICIO (Knorr, *Terra Sigillata*, 1919, Pl. 75A; see also Pl. 46C, LICINVS F). The bowls by the potters PASSENVS and GERMANVS (Pl. IV. 2 and 8), both of whom commenced work in the reign of Nero, furnish us with some early examples of festoon decoration; whilst those by the potters MEDDILLVS, VIRILIS and VITALIS (Pl. IV. 9; Pl. V. 2, 9) can be more confidently ascribed to the Flavian period. Examples of this *motif*, applied indiscriminately either to the upper or lower frieze, are indeed plentiful on Flavian sites (e.g. by MOMMO, SECVNDVS and VITALIS at Pompeii, Atkinson, *op. cit.* 11, 19, 23, 24, 27, 29; Knorr, *Rottweil*, 1912, Pls. I. 2; V. 15; VII. 10, etc. Bushe-Fox, *Arch.* 64, Carlisle 2, Corbridge 28; Curle, *Newstead*, p. 205, 2, 3).

This *motif* was also extensively applied to early examples of Form 37 by the potters of the Flavian era (cf. Pl. XI. 2, and Atkinson, Knorr, Curle and Bushe-Fox, *op. cit. passim*).

(g) Panel-decoration is of frequent occurrence on the lower frieze. It is found as early as the Claudian period, e.g. in a bowl by AQVITANVS at Vindonissa (Pl. III. 9) and in the first occupation of Hofheim (Ritterling, Pl. XXIV. 3, 10; Pl. XXV. 9; and our Pl. VI. 6).

In the earlier examples the panels consist of alternating cruciform and medallion ornaments (*vide supra*), the medallions encircling figures of birds and animals or else conventional plants.<sup>1</sup>

<sup>1</sup> This particular scheme was adopted by AQVITANVS, DARRA, FELIX, MELVS, MODESTVS and PRIMVS (early work).



This *motif* is also displayed in a bowl by the Nero-Vespasian potter PASSENVS (Pl. IV. 3), and it continued down to Flavian times, as in bowls by MOMMO found at Pompeii (Atkinson, *op. cit.* 3, 5, 13, 18).

Occasionally this alternation of medallion and cruciform decoration was transferred to early examples of Form 37, as on a bowl by MEMOR at Pompeii (Pl. XV. 6). Generally speaking, however, panel-decoration in the Flavian period shows a greater variety of treatment than at an earlier date, for human and animal figures, arrowheads by themselves or with oblique lines, etc., are often substituted for the medallion and cruciform ornaments or are added to them (*e.g.* Pls. V. 1, VI. 7-9; by MANDVILVS and MOMMO at Pompeii, Atkinson, *op. cit.* 2, 6, 8-II, 14, 19, 31, 32; Knorr, *Rottweil*, 1912, Pls. VI. 5, 13, VII. 1, XI. 1, etc.; by NIGRINVS and COSIVS RVFVS at Carlisle, Bushe-Fox, *Arch.* 64, 4, 7, 9; Curle, *Newstead*, p. 205, 8, and p. 211, 2).

The division of the panel or compartment by a horizontal wavy line or bead-row into two areas, the so-called *divided* metope—so common a custom in Form 37 in the late Domitian, Trajan, Hadrian and Antonine periods—makes its appearance in Form 29 so early as the reign of Vespasian, *e.g.* on a bowl by MOMMO at Pompeii (Atkinson, *op. cit.* 14). It is also found during the Domitian period on Form 29, *e.g.* at Rottweil (Knorr, 1912, Pls. IX. 12, XI. 1), at Newstead (Curle, p. 205, 8, and 211, 2; our Pl. VI. 9) and at Carlisle on a bowl by NIGRINVS (Pl. VI. 7). Corner-tendrils form a frequent but not invariable feature in South Gaulish panel ornamentation (Pls. III. 9; IV. 3; VI. 4, 6, 8, 9).

(h) Running animals in series. The combination of running animals with intervening fan-tailed plants, as on a bowl by RVFINVS from Pompeii (Pl. V. 7), is frequent in the Flavian period, and would appear to have been a favourite *motif* with the later South Gaulish potters.

This *motif* does not occur at Hofheim and is still rare at Pompeii, whilst it is more especially characteristic of the fabric of Domitian's reign, and is present at Rottweil, Carlisle (Bushe-Fox, *Arch.* 64, 3) and Newstead (Curle, p. 215, 1). It may indeed occur on either frieze, and is sometimes associated with a small grass tuft, over which the animal strides (Pl. V. 1; and Knorr, *Rottweil*, 1912, Pls. VI. 13 and VII. 1, 2). It was employed by the potters COELVS, COSIVS RVFVS, PASSENVS, PONTVS and RVFINVS on vessels of Form 29, and was transferred by MERCATOR and other Flavian potters to Form 37. A reference to the above-cited memoirs will testify to the very common application of this *motif* to early examples of Form 37.

(i) Animals occurring freely in the field—the forerunner of the so-called Free Style—are only of sporadic and isolated occurrence on Form 29. On the lower frieze it is found in a bowl by MOMMO from Pompeii (Atkinson, *op. cit.* 15).

Another instance of the early and restricted application of this style (on the upper frieze) is present in a bowl by GERMANVS at Rottweil (Knorr,

*Rottweil*, 1907, Pl. V. 1) ; but good instances of the fully developed *free-style* are forthcoming at Vindonissa (lower frieze of a bowl by the Claudian potter GENIALIS, Pl. XXVI. 7) and at Silchester (Pl. XIX. 2).

(j) *Miscellaneous Types*. Amongst the many miscellaneous decorative types a few of the predominant cases may be noted here, viz. :

(i) An *S-shaped motif* occurs occasionally on the lower frieze, as on a bowl by SEVERVS (Pl. IV. 6), but this ornament is, however, more frequent on early examples of Form 37.

(ii) A series of upright stalks terminating in buds, as on bowls by MOMMO at Pompeii (Atkinson, *op. cit.* 23) and by RVFINVS also at Pompeii (Pl. V. 11).

(iii) A pattern of imbricating semicircular scales occurring as an infilling to the lower concavity of a continuous scroll, *e.g.* on a bowl by RVFINVS at Newstead (Curle, p. 215, 5). The prototype of this ornament occurs on a Tiberian bowl (Pl. XXIX. 1). In its developed form it is found in the Claudius-Nero period, as at Margidunum (Pl. XXIX. 8).

(iv) The human figure, in contradistinction to the figures of birds and animals, is comparatively infrequent as an ornament on Form 29. It is more especially met with in the Flavian period ; yet the human head, as part of an animal design, occurs as early as the Claudian period, *e.g.* in the form of a series of mermaids (Pl. XXV. 1) and as a terminal on a bowl by DARIBITVS at Vindonissa (Pl. XXV. 2). Mention may also be made amongst others of the wolf suckling Romulus and Remus (Déchelette, ii. 494), Diana and biga (Walters, *C.R.P.* M 365), satyr playing the double flute (on a 29 by CALVVS at Sels). But these and other figure types will be more particularly considered when the subject of decoration is treated as a whole (Chapter VI.).

(v) A lattice pattern of wavy lines with rosettes in the centre (Atkinson, *op. cit.* Fig. 28, OF VITA) ; a *motif* which also appears on early examples of Form 30.

(iv) *WREATH (OR OTHER MOTIF) AT BASE OF LOWER FRIEZE.*

A straight wreath (or other *motif*) forms a lower border to the design at quite an early date, and was frequently adopted by the potters of the later period of Form 29.

For instance, a Tiberian bowl from Strasbourg (Pl. III. 7) has a lower border of rosettes, and a Tiberian bowl from Jort (Pl. XXVIII. 16) shows a continuous scroll in this position ; a straight wreath occurs on a bowl by the early potter ARDACVS from Vindonissa (Pl. V. 3). The use of the leaf-wreath is, however, not found at Hofheim, and it did not become a

common practice until the Nero-Flavian period, when the basal wreath is often met with on Form 29; but it is more especially abundant on early examples of Form 37. Instances of this method of decoration, as applied to Form 29, on bowls by the potters RVFINVS and SEVERVS, found at Pompeii and Rottweil respectively, are illustrated on Pl. V. 7, 11, and Pl. IV. 6. Other specimens by MOMMO and VITALIS from Pompeii are figured by Atkinson (*op. cit.* 6, 15, 21, 22, 29, 35, 36). The thorough-going transference and application of this *motif* to vessels of Form 37 in the Flavian period is abundantly demonstrated by the following numerous references (Atkinson, *Pompeii*, 37-40, 43, 45, 46, 48-51, 53-59, 61-63, 65, 66, 68, 71, 74-77, 79, 81; Knorr, *Rottweil*, 1912, Pls. XIV. 1; XIX. 1, 2; XX. 1, 2, 4; XXI. 1, 5-7, etc.; Curle, *Newstead*, p. 207, 3; 209, 6; 211, 5; 213, 9; 215, 8, 9; 217, 5, 6).

Occasionally both the central and basal "wreath" zones are present, as in the bowls by SEVERVS and RVFINVS (Pl. IV. 6 and Pl. V. 7, 11)—the vessel thus exhibiting four decorated bands (see also Knorr, *Rottweil*, 1912, Pl. IX. 1).

#### SUMMARY.

It will be seen that, in estimating the date of any particular specimen of Form 29, many factors have to be taken into consideration.

The mode of ornamentation will seldom be sufficient in itself as a criterion, for many decorative *motifs* persisted throughout the life of the vessel.

All the various elements of chronological significance must be borne in mind and weighed in evidence, such as outline and contour, glaze (with due reservation as to provenance), the character of the fracture and texture of the paste, the nature of the ornament and design, the name of the potter, etc.

Broadly speaking, it may be stated that the general trend of the design proceeded from the purely ornamental and decorative to the mixed *motif*, viz. the combination of ornament with figures, and that the panel type of decoration became more pronounced in the later or Flavian stages of the vessel's history.

Occasionally this form was reproduced in marbled ware (as at Pompeii, Pl. XXVIII. 11) and in green-glazed ware (Colchester).

Potters' stamps are found on the interior base of the vessel, as in its immediate Italian predecessor, the decorated crater of ATEIVS.

Occasionally, in addition, the potter's imprint is found on the exterior amongst the decoration of the upper or lower frieze, as at Colchester—FRONTINVS, MYRRANVS, VOLVS; Pompeii—MOMMO; and Rottweil—SEVERVS.



## POTTERS' STAMPS ON FORM 29.

Whenever there is sufficient evidence that two or more potters have worked under the same name, the fact is indicated by the prefix (i), (ii), etc.

The period of the potter's greatest activity, whenever ascertainable, is inserted after the site of his pottery.

British sites of provenance are marked in Italics.

Hofheim I. signifies the Claudian occupation of the earth-fort.

Wiesbaden O.L. signifies the pre-Flavian stratum.

G.P.O.—General Post Office, London.

- |             |  |
|-------------|--|
| (i) ACVTVS  | (Montans, Tiberius—Nero) ACVTI MA Vichy ; ACVTI M <i>Pleshey</i> (Essex).  |
| (ii) ACVTVS | (probably early Flavian) ACVTI Zürich.   |
| (i) ALBINVS | (La Graufesenque, Tiberius—Claudius) ALBINI Brengenz, Xanten ; ALBINVS F Orleans.  |
| ALBVS       | (La Graufesenque, Claudius—Nero) ALBVS FE La Graufesenque, Aislingen ; ALBI Lectoure.  |
| (i) AMANDVS | (La Graufesenque, Tiberius—Nero) AMANDVS Mainz, Worms ; AMANDI Brumath.  |
| L. APRONIVS | (Montans, Flavian) L. APRON Montans.   |
| AQVITANVS   | (La Graufesenque, Late Tiberius—Nero) OF AQVITANI <i>London</i> , Neuss, Wiesbaden O.L., Vindonissa ; OF AQVITAN Roanne, Wiesbaden, Neuss ; AQVITANI Aislingen, Hofheim I. |
| ARDACVS     | (La Graufesenque, Claudius—Nero) OF ARDACI Autun, Vindonissa, Andernach ; ARDACI La Graufesenque ; OF ARDA Solothurn.  |
| ARMANDVS    | (? Amandus) ARMAND Mainz.  |
| ATEPOMARVS  | (Lezoux, Claudius—Nero) ATEPOMAR OF Lezoux, ATEPOMARVS Compiègne, ATEPOMAR Lezoux, ATEPOMA Lezoux, ATEPOM Lezoux, Moulins, ATEPOMAR FEC Luxeuil.                           |
| AVE VALE    | (Banassac, Claudius—Nero) AVE VALE Poitiers.   |
| (i) AVITVS  | (La Graufesenque, Flavian) AVIT O Torre Annunziata.  |
| BALBVS      | (La Graufesenque, Tiberius—Claudius) BALBVS F Aislingen, Andernach.  |
| BASSVS      | (La Graufesenque, Tiberius—Nero) OF BASSI La Graufesenque, Strasbourg ; BASSI OF Aislingen, BASSI Hofheim I., BASSVS Mainz.  |

BASSVS and COELVS	(La Graufesenque, Claudius—Vespasian) OF BASSI COELI Xanten, OF BASSI COEL Xanten, Hofheim I., OF BASSI CO Aislingen, Hofheim, Wiesbaden O.L., Strasbourg, Trèves, Clermont Ferrand, Vienne, Pompeii, <i>London</i> (Guildhall and G.P.O.); BASSI CO Vindonissa.
BILICATVS	(La Graufesenque, Tiberius—Claudius) OFIC BILICAT <i>London</i> (Brit. Mus. and Guildhall), Mainz, Kreuznach; OF BILICAT <i>London</i> (King William Street), Wiesbaden O.L.
BIO	(La Graufesenque, Claudius—Nero) BIO mould La Graufesenque.
CABIATVS	(Lezoux (?), Flavian) CABIATI M Neuss.
CABVCA	(La Graufesenque, Claudius—Vespasian) CABVCA Vindonissa.
CAIVS	(La Graufesenque, Flavian) OF CAIV <i>York</i> ; OF CAI <i>London</i> (Guildhall); CAI[ <i>Corbridge</i> .
CALVVS	(La Graufesenque, Nero—Domitian) OF CALVI <i>Col-</i> <i>chester</i> , Sels, Neuss, Bregenz, Aislingen, Mougin; CALVII Bonn.
C. AND PATR.	(?) CANDPATR Bregenz.
CANTVS	(La Graufesenque, Tiberius—Nero) OFIC CANTI Augst.
CARIANVS	(?) CARIANA <i>London</i> (Guildhall).
CARILLVS	La Graufesenque, (Flavian) CARILLI F Strasbourg; CARILLI Rottweil.
CARVCATVS	(Lezoux, Flavian) CARVCATI Clermont-Ferrand, Mainz, Vechten.
CARVS	(La Graufesenque, Claudius—Nero) CARVS FE Vech- ten, Mainz, Vindonissa; CARI M Neuss.
CARVTIVS	(?) CARVTIVS Neuss.
(i) CASTVS	(La Graufesenque, Claudius—Nero) OF CAST <i>London</i> (Brit. Mus.); CASTVS FE La Graufesenque; CASTVS F La Graufesenque.
CATLVS	(La Graufesenque, Tiberius—Claudius) CATLI OF Strasbourg.
(i) CATVS	(La Graufesenque, ?) OFI CATI St. Germain.
CELADVS	(La Graufesenque, Claudius—Vespasian) CELADI MAN La Graufesenque, Narbonne; CELADI MA Car- thage; CELADI M Aislingen.

CELER	(Montans, Claudius—Nero) CELER FEC Montans.
(i) CENSOR	(La Graufesenque, Flavian) OF CEN <i>London</i> (Brit. Mus.), <i>Corbridge</i> , Vienne, Vindonissa ; OF CENS <i>Kempton</i> .
CHRESIMVS	(Montans (?), Flavian) CHRESIM <i>Wroxeter</i> .
(i) COBNERTVS	(Lezoux, Flavian—Trajan) COBNERTVS <i>Lezoux</i> , <i>Tours</i> .
COCVS	(La Graufesenque and Banassac, Claudius—Nero) OF COCI <i>Rome</i> , <i>Cusset</i> .
COELVS	(La Graufesenque, Flavian) OF COELI <i>Carlisle</i> , <i>Wroxeter</i> , <i>Rottweil</i> , <i>Baden-Baden</i> , <i>Vechten</i> , <i>Nijmegen</i> .
COLONVS or COTOVS	(South Gaul, Nero—Flavian) OF COIOI <i>London</i> (Brit. Mus.) ; OF COTOI <i>Wroxeter</i> , <i>Bonn</i> .
CONSTIC . . .	( ) OF CONSTIC <i>St. Germain</i> .
COSIVS and RVFINVS	(La Graufesenque, Flavian) COSI RVF <i>London</i> (G.P.O.) COSI RV <i>Carlisle</i> , <i>Camelon</i> , <i>Colchester</i> , <i>Mainz</i> , <i>Nijmegen</i> ; COS RVF <i>Colchester</i> .
L. COSIVS and VIRILIS	(La Graufesenque, Flavian) OF L COS VIRILI <i>Baden-Baden</i> .
(i) CRESTIO or CRESTVS	(La Graufesenque, Claudius—Vespasian) OF CRESTIO <i>London</i> (Brit. Mus. and Guildhall), <i>Silchester</i> , <i>Clermont-Ferrand</i> , <i>Vichy</i> , <i>Hofheim</i> ; OF CRESTI <i>Wroxeter</i> , <i>Leicester</i> , <i>Silchester</i> , <i>Vichy</i> , <i>Baden-Baden</i> , <i>Rheinzabern</i> ; OF CREST <i>London</i> (Guildhall), <i>Carlisle</i> ; CRESTI <i>London</i> (Guildhall).
(ii) M. CRESTIO	(La Graufesenque, Domitian—Trajan) M CRESTIO <i>London</i> (Guildhall).
DAMONVS	(La Graufesenque, Claudius—Nero) DAMONI <i>Mainz</i> .
DANOMARVS	(Lezoux, ) DANO MA <i>Lezoux</i> .
DARIBITVS	(La Graufesenque, Claudius—Nero) DARIBITVS <i>Vindonissa</i> , <i>Cusset</i> .
DARRA	(La Graufesenque, Claudius—Nero) DARRA FE <i>Neuss</i> .
FELIX	(La Graufesenque and Montans, Claudius—Vespasian) OF FELICIS <i>London</i> (Brit. Mus.), <i>Silchester</i> ; FELICIS MA <i>London</i> (Brit. Mus.), <i>Vichy</i> , <i>Hofheim</i> ; FELIX <i>La Graufesenque</i> .
FIRMO	(La Graufesenque, Tiberius—Claudius) FIRMO FEC <i>Mainz</i> .



- FRONTINVS (La Graufesenque, Flavian) OF FRONTINI *London* (Brit. Mus.), *Camelon*; OF FRONTIN Rottweil; O FRONT Rottweil; FRONTINI *London* (Brit. Mus.), *Colchester*; FRONTI *Colchester*.
- FVSCVS (La Graufesenque, Flavian) FVSCVS Augst.
- GALLICANVS (La Graufesenque, Claudius—Nero) GALLICANI MA Perouse, Aislingen; GALLICANI Rome, Mainz; GALLICANI *London* (Guildhall), Cusset.
- GALLICVS (La Graufesenque, ) GALLICI M La Graufesenque.
- GEMINVS (Lezoux (?), Flavian) GEMINVS Clermont-Ferrand, Xanten.
- (i) GENIALIS (La Graufesenque, Nero—Vespasian) GENIALIS F Vindonissa.
- GENITOR (Lezoux, Domitian—Trajan) GENITOR F *London* (Guildhall).
- GERMANVS (La Graufesenque, Nero—Vespasian) GERMANI OF Pompeii, Avignon, Trèves, Riegel, Rottweil, Günzburg; GERMNI OF Trèves; GERMANI *London* (Guildhall), Pompeii, La Graufesenque, Bonn, Wiesbaden O.L.
- Q. IVL. HABILIS (La Graufesenque, ) Q. IV[ *Newstead*.  
or  
Q. IVL. PRIMVS
- IATEVS (Vichy (?), ) IATEI F Vichy.
- ILLIOMARVS (Lezoux, Claudius—Flavian) ILIOMAR Lezoux.
- ILVSTVS (La Graufesenque, Flavian) ILVST Studenberg (Berne), Vichy.
- INGENVVS (La Graufesenque, Tiberius—Nero) OFFIC INGEN Hofheim I.; OFIC INGEN *Silchester*; OF INGENVI Sels, Hofheim I.
- (i) IVCVNDVS (La Graufesenque, Nero—Flavian) OF IVCVNDI Rome, Vichy; OF IVCVND Rome, Geislingen; OF IVCVN *London* (Guildhall), *Silchester*; IVCVNDVS Mainz; IVCVNDI *London* (Guildhall), Rome, Vichy; IVCVND *London* (Guildhall, King William Street), Mainz, Cusset.
- SEXTVS IVLIVS (South Gaul, Flavian) SEX IVL IVCVND Bonn.  
IVCVNDVS
- (i) IVLIVS (La Graufesenque or Banassac, Flavian) IVLI OF *London* (Brit. Mus.).

IVLLVS	(Montans, Flavian) IVLLI Lectoure, Neuss.
(i) IVSTVS	(La Graufesenque, Flavian) I IVST <i>London</i> (Guildhall), Kempten ; IVSTI Xanten ; IVST Rome.
LABIO	(La Graufesenque, Claudius—Nero) OF LABIONIS <i>London</i> (Brit. Mus., Guildhall, King William Street), Neuss ; OF LABIO Aislingen, Bregenz.
(i?) LIBERTVS	((?) La Graufesenque, Claudius—Nero) LIBERTVS Vechten.
LIBNVS	(La Graufesenque, Tiberius—Claudius) LIBNVS Eppelsheim.
LICINIANVS	(La Graufesenque, Claudius—Nero) OF LICINIANI Mainz ; OF LICINIANA <i>London</i> (Guildhall), Vindonissa.
LICINVS	(La Graufesenque, Tiberius—Nero) LICINVS F <i>London</i> (Brit. Mus., and Guildhall), Hofheim I. ; LICINVS Mainz, Neuss.
LVCCEIVS	(La Graufesenque, Nero—Flavian) OF LVCCEI Mainz, Vechten.
MACCARVS	(La Graufesenque, Tiberius—Claudius) MACCARI Sels, Vindonissa ; OF MACCARI Vechten.
MACCIVS	((?) La Graufesenque, Flavian) MACCIVS Colchester.
MACER	(La Graufesenque, Flavian) MACRI MA <i>Wroxeter</i> , La Graufesenque ; MACRI M <i>London</i> (Guildhall), Cologne.
(i) MAGNVS	((?) La Graufesenque, Flavian) MAGNI MA <i>London</i> (Guildhall).
MANDVILVS	(La Graufesenque, Nero—Vespasian) MANDVIL M Pompeii.
(i) MARCVS	(La Graufesenque or Montans, Flavian) OF MARC Vienne.
(i) MARINVS	(La Graufesenque, Nero—Vespasian) MARINVS FE <i>London</i> (Guildhall and King William Street) ; MARINVS F <i>London</i> (Guildhall), Mainz, Vechten.
MARSSVS	((?) La Graufesenque, Flavian) MARSSI MA (? 29) <i>Silchester</i> .
(i) MARTIALIS	(La Graufesenque, Flavian) MARTIALIS <i>London</i> (Guildhall) ; MARTIALIS FEC <i>Silchester</i> ; MARTIALIS F Mainz.
(i) MARTIVS	(La Graufesenque, Flavian) OF MARTII <i>London</i> (Brit. Mus.).

- MASCLVS (La Graufesenque, Claudius—Early Vespasian) OF MASCL Colchester, Vienne, Cusset ; MASCLVS FE Cusset, Sels ; MASCLVS Poitiers, Reichenhall.
- (i) MATVGENVS (Montans, Nero—Vespasian) OF MATV London (Guildhall), Aislingen, Hofheim ; MATVGEN Albi.
- MEDDILLVS (La Graufesenque, Flavian) MEΘILLVS London (Brit. Mus. and Guildhall), Leicester, Exeter, York, Wroxeter, Weisenau (Mainz), Rottweil, Xanten, Riegel.
- MEDDIRIVS (Lezoux (?), ) MEΘIRIVS Mainz.
- MELAINVS (South Gaul, Claudius—Nero) MELAINI MA Vechten.
- (i) MELVS (La Graufesenque, Claudius—Nero) MELVS FECI Strasbourg, Mainz ; MELVS FE Mainz.
- (i) MERCATOR (Montans, Flavian) OF MERC Baden-Baden, Vienne, MERCATO Friedberg.
- MODESTVS (La Graufesenque, Claudius—Nero) OF MODESTI London (Guildhall), Leicester, Silchester, Bonn, Vechten ; OF MODEST London (Guildhall) ; MOD Vechten, Mainz, Hofheim.
- MOMMO (La Graufesenque, Claudius—Vespasian) OF MOMMO Pompeii, La Graufesenque ; OF MOMI Pompeii ; OF MOM Silchester, Pompeii, Orange, La Graufesenque ; MOM Wroxeter, Pompeii, Pérouse ; OF MO La Graufesenque, ? =MODESTVS.
- MONIVS (La Graufesenque, Claudius—Nero) MONI[ Wiesbaden O.L.
- MONTICVS (La Graufesenque, Flavian) OF MONTCI Vindonissa ; OF MO[NTI]C[I] Pompeii.
- MVRRANVS (La Graufesenque, Claudius—Early Vespasian) OF MVRRANI London (Guildhall and Soc. Antiq.) ; OF MVRRAN Colchester ; OF MVRR London (Brit. Mus., Guildhall and King William Street) ; OF MVR London (Guildhall) ; MVRR London (G.P.O.) ; MVRR London (G.P.O.) ; MV Chesterford.
- NAMVS (South Gaul, Claudius—Nero) NAMVS FE Mainz.
- NIGER (Banassac, Claudius—Vespasian) OF NIGRI London (Brit. Mus.), Bonn ; OF NGRI London (Guildhall)
- NIGER (La Graufesenque, Claudius—Vespasian) OF NIGRI AND Wroxeter (?), Colchester, Hofheim ; NIGRI AND London (Guildhall).



NIGRINVS	(La Graufesenque, Flavian) NIGRINI <i>Carlisle</i> .
ORIGESVS	( ) ORIG . . . SV Mainz.
PASSENVS or PASSIENVS	(La Graufesenque, Nero—Vespasian) OF PASSENI <i>London</i> (Brit. Mus.); <i>Colchester</i> , <i>Carlisle</i> , Cusset, Heidelberg, Aislingen ; OF PASSEN <i>London</i> (Brit. Mus.), Vindonissa ; OF PASSIEN <i>Silchester</i> , <i>Lei-</i> <i>cester</i> , Mainz, Hofheim.
(i) PATRICIVS	(La Graufesenque, Nero—Domitian) OF PATRICI La Graufesenque, Pompeii, <i>London</i> (Guildhall) ; OF PATRIC Strasbourg ; PATRCV <i>Silchester</i> .
(i) PAVLLVS	(La Graufesenque, Claudius—Domitian) PAVLLVS Pompeii.
PETRECVS	(Lezoux, Claudius—Nero) PETRECI Lezoux.
POLIVS	(La Graufesenque, Claudius—Vespasian) OF PO[LI] Hofheim I. ; POLI Wiesbaden O.L.
PONTVS	(La Graufesenque, Flavian) OF PONTI <i>Buxton</i> , Rome ; OF PONTI M <i>London</i> (Guildhall) ; OF PO <i>Carlisle</i> .
PRIMVS	(La Graufesenque, Claudius—Vespasian) OFIC PRIMI Rottweil, Mandeure ; OF PRIMI <i>Silchester</i> , <i>Lon-</i> <i>don</i> (Guildhall), Arles, Hofheim, Neuss, Reims ; OF PRIM Vindonissa ; PRIMI OFF <i>Silchester</i> ; PRIMI MA <i>London</i> (Brit. Mus., Guildhall, King William St.) ; PRIMI M Mainz ; PRIMVS FE Clermont-Ferrand. Probably the work of more than one potter is included in this list.
SEXTVS IVLIVS PRIMVS	(Montans, Flavian) S IV PRIM Montans.
PVDENS	(South Gaul, Flavian) OF PVDENT Emerkingen, Rott- weil.
QVARTVS	(La Graufesenque, ) QVARTVS Dax ; QVARTIO <i>London</i> (Brit. Mus.).
(i) QVINTVS	(La Graufesenque, ) QVINTIO <i>Colchester</i> , <i>London</i> (Guildhall) ; QVIN Montans.
RANTO ROPPVS	(Luxeuil, Domitian—Trajan) RANTOF Heddernheim. (South Gaul, ) ROPPVVS FEC (29 ?) <i>Col-</i> <i>chester</i> .
ROPPVS and RVTVS	(Lezoux, ) ROPPI RVT M (29 ?) <i>Col-</i> <i>chester</i> .

RVFIVS	(La Graufesenque, Nero—Domitian) OF RVFINI <i>Newstead, Carlisle, Camelon, London</i> (Guildhall, Bethnal Green Mus.), Pompeii; OF RVFIN <i>London</i> (Brit. Mus. and King William St.), <i>Colchester, Rottweil</i> .
RVFVS	(La Graufesenque and Montans, Nero—Domitian) OF RVF <i>London</i> (Guildhall), <i>Camelon</i> .
RVSTICVS	(La Graufesenque, ) OF RVSTICI Cusset.
(i) SABINVS	(La Graufesenque and Montans, Flavian) OF SABIN <i>London</i> (Brit. Mus.); SABINI Mainz; SABINVS FE <i>London</i> (Brit. Mus.); SABINVS F Pompeii; SABINVS <i>London</i> (Brit. Mus.), <i>Wroxeter, Pompeii</i> .
SALVETVS	(Montans, Claudius—Nero) S[A]LV[E]TV <i>Colchester</i> ; SALV <i>Colchester</i> ; SALVE M dec. vase (? 29) Montans.
SASMONOS	(La Graufesenque, Flavian) SASMONOS Pompeii, <i>Rottweil</i> .
SATTO	(East Gaul, Domitian—Hadrian) SATTO FECIT Gnotzheim.
SCOTTIVS	(La Graufesenque, Tiberius—Nero) SCOTIVS Weisenau (Mainz); SCOTTIVS Mainz, Hofheim I., Urmitz; OFI SCOTTI Bregenz.
(i) SECVNDVS	(La Graufesenque, Claudius—Domitian) OF SECVNDI Rome; OF SECVND <i>London</i> (Brit. Mus. and Guildhall), Rome; OF SCVN Pompeii; SECVNDI OF Cologne; SECVNDI <i>London</i> (Guildhall).
SENICIO	(La Graufesenque, Tiberius—Claudius) SENICIO FE <i>Silchester, Aislingen, Strasbourg, Arnsheim, Vechten</i> ; SENICIO <i>London</i> (Brit. Mus.), Mainz.
SENO	(La Graufesenque, Tiberius—Nero) SENO M Aislingen, Nijmegen; SENO MA Ristissen.
SEVERVS	(La Graufesenque, Nero—Flavian) O SEVERI <i>London</i> (Guildhall), <i>Colchester</i> ; SEVERI M <i>London</i> (Brit. Mus.); SEVER <i>Rottweil</i> .
(i) SEXTVS	(La Graufesenque, ) SEXTI O Neuss.
(i) SILVANVS	(La Graufesenque, Claudius—Domitian) OF SILVANI Pompeii, Vichy; OF SILVAN <i>Silchester, Rottweil</i> .
C. SILVIVS and PATRICVS	(La Graufesenque, Flavian) SILVI PATRICI Wiesbaden, Heidelberg; C SILVI P <i>London</i> (Guildhall), Mainz.

STABILIO	(South Gaul, Tiberius—Claudius) STABILIO F Weisenau (Mainz), Sels, Bregenz, Vechten.
SVRRIVS	(South Gaul, Flavian) SVRRIV Vindonissa, Vechten.
TITVSIVS	( ) TITVSIVS FE Tours.
VALERIVS	(Montans, Claudius—Nero) VALERIO London (Brit. Mus.); VALERI Montans, Augsburg.
VANDERIVS	(La Graufesenque, Nero—Vespasian) VANDERI O Wroxeter, VADERIO Kempten.
VAPVSO	(La Graufesenque, Tiberius—Claudius) VAPV[ Mainz.
VIBINVS (?)	(La Graufesenque, ) VIBINI London (Brit. Mus.). Probably a misreading for ALBINI.
(i) VIRILIS	(La Graufesenque, Flavian) VIRILLI O Torre Annunziata; OF VIRILI Vindonissa, Baden-Baden; VIRILIS Rottweil.
(i) VIRTHVS or VIRTVS	(La Graufesenque, Claudius—Flavian) VIRTHV Pompeii.
(ii) VIRTVS	(La Graufesenque, Flavian) OF VIRTVTIS Wroxeter, Carlisle, London (Guildhall), Rottweil.
(i) VITALIS	(La Graufesenque, Nero—Vespasian and Early Domitian) OF VITAL London (Brit. Mus. and Bethnal Green), Rome, Rottweil OF VITA Pompeii, Carthage, Neuss; VITA Strasbourg.
VITLVS	(Puteoli (?)—South Gaul, Tiberius—Claudius) VITLVS Silchester.
VOLVS	(La Graufesenque, Tiberius—Claudius) VOLVS Colchester, Autun, Hofheim; OF VO London (G.H.)
VRVOED	(South Gaul, Tiberius—Claudius) VRVOED Mainz.

## DRAGENDORFF FORM 30.

## THE DECORATED CYLINDRICAL BOWL.

## 1. General distinguishing features.

Apart from slight modifications in the determining cylindrical shape of this bowl, the variations in contour are not so considerable as in Form 29. Generally speaking, the earlier vessels are somewhat low in height and bold in form, the height being markedly less than the diameter at the rim; but subsequently the height increases at the expense of the diameter (cf. Pl. VII. 1 with 4).

Not uncommonly in the Flavian and Trajan-Hadrianic periods the wall



has a definite outward slant, as in the bowls from Newstead and Rottweil, and in that ascribed to ALBILLVS of La Madeleine (Pls. VII. 2; VIII. 4; VII. 4). The typical vertical wall of the earlier vessels is well shown in the example from Hofheim I. (Pl. VII. 1).

The degree in which the wall tends to incline outwards is not, however, of specific chronological value, taken by itself, for it occurs in the Claudian bowl by MASCLVS (Pl. VIII. 2).

Moreover, it should be noted, on the other hand, that some Antonine examples have practically vertical walls (Pl. VII. 3).

## 2. *Period.*

The cylindrical decorated bowl was manufactured in abundance by the early potters of South Gaul. It came into being about the same time as the carinated bowl; indeed, the origin of both these types must be regarded as practically contemporaneous. In some of its decorative details, such as the ovolo ornament, Italian influence is more strongly marked than in the preceding type, and the Italic technique of the earliest examples as found at Colchester (Pl. X. 5), Silchester (May, *op. cit.* Pl. II. 10), Bregenz, Mainz and Neuss (Knorr, *Terra Sigillata*, 1919, Pls. 41 H, K; 51 H), is distinctly in evidence.

Moreover, there is good evidence to show that, owing to the uninterrupted and relatively large surface available for decoration, figure-subjects as well as ornamental details, such as the St. Andrew's Cross *motif*, occurred more frequently on this bowl, at an early period, than on Form 29, and that some of them, notably the St. Andrew's Cross ornament, were subsequently adopted by makers of the carinated bowl.

Already, in the early period at Hofheim (40-51 A.D.), the cylindrical bowl is plentifully represented, and it continued to be produced well into the middle of the second century or even a little later, e.g. at Westerndorf (160-180 A.D.) and Trèves.

Probably the year 180 would mark its extreme limit, for it is not represented at all at Niederbieber—a site dated 190-260 A.D.

Its manufacture was common to all the chief centres of the Sigillata industry, viz. South, Central and, rarely, East Gaul (as far north as Trèves), and even to the more eastern pottery of Westerndorf (Pl. VIII. 8).

## 3. *Form, evolution and development.*

Owing to the long life of this vessel, its form is not, in itself, of much chronological value, but it presents a large surface for decoration, and the various designs may with considerable accuracy be assigned to definite periods. Further, on closer inspection, it is found that certain characteristics in outline, dimensions and general technique form corroborative evidence of much value for dating purposes.

As yet the evolution of this form from an Italian prototype cannot be clearly traced, for although it is true that decorated cylindrical bowls were

made at Arretium (Pl. II. 5, M. PEREN)<sup>1</sup> and also in the form of a beaker in the Augustan period (Loeschcke Type 20), yet both these types are lacking in many features which are characteristic of the Gaulish form—notably the footstand which is invariably present in the provincial vessel.<sup>2</sup>

A closer approximation is, however, to be found in the plain Italian Sigillata beaker (Loeschcke Type 16) which occurs at Haltern (Pl. XXIII. 12).

On the other hand, a remarkably close resemblance is presented by the bowl of "Megarian" type found at Melos (Pl. II. 6), and this significant circumstance is suggestive of a possible influence of the Grecian civilization of Marseilles upon the art of the South Gaulish potters.

The relatively thin walls and the glossy lustrous glaze of many early examples of Form 30 indicate the influence of metal-work, and it is probable that the silver cups of the Augustan age, such as those found at Bosco Reale (Pl. XXII. 1, 7), played no mean part in its development.

The leading external characteristics of this form are the plain rim and the ornamented vertical wall. The rim is bounded on its upper edge by a semicircular lip, delicately moulded in the earlier examples (Pl. VII. 1, 5), but heavier and projecting outwards in vessels of the later period (Pl. VII. 3, 4). Inferiorly, the rim is delimited from the decorated surface of the bowl by a constriction or girth-groove in the form of a shallow fluting, which may be multiple in the earlier vessels (Pl. VII. 1, 2, 5-7; Pl. VIII. 1-6). This fluting is consistently present right down to the end of the Flavian period and perhaps a little later.<sup>3</sup>

But in the later vessels, e.g. those which may be attributed to the Hadrian-Antonine period, generally only its vestiges remain in the form of a narrow groove, as in the bowl by DIVIXTVS (Pl. VIII. 7), or of a minute "step" situated immediately above the ovolo border (Pl. VII. 3, 4; Pl. VIII. 8). The depth of the plain band of the rim, below the lip, almost invariably increases with the passage of time, both relatively and absolutely to the size of the vessel. This gradual deepening of the plain rim is well demonstrated by our figures—Pls. VII. 1, 2; VIII. 6, 7; VII. 4, 3; and VIII. 8. They illustrate the successive changes which took place from Claudian to Antonine times.

The decorated wall of the vessel is also delimited below by one or more flutings, which become heavier and less elegantly executed in the later examples (cf. Pl. VII. 1 and 3).

<sup>1</sup> See also Déchelette, i. 22, Fig. 4, where a fragment of the true form appears to be represented. It is probably, however, an early example of South Gaulish work. An early Form 30 at Kempton has the everted rim of the PERENNIVS cylindrical bowl (Knorr, *Terra Sigillata*, 1919, Pl. 95B). See also Appendix.

<sup>2</sup> Similar objections may be taken to the *Acro* beakers (Pl. XXIII. 11), but it must be noted that an incipient footstand is present in some examples (Pl. XXIII. 13; see also Déchelette, i. Figs. 18, 19).

<sup>3</sup> Sporadically, it persisted into the mid-second century, as in the bowl by CINNAMVS (Corbridge, *Arch. Æl.* Vol. viii. Fig. 13, 2).

The rectangular lower angle of the wall of the vessel is followed by a hollowed base convex externally and concave internally. This rectangular angle and the correlated internal basal concavity have degenerated in the late example at Trèves (Pl. X. 10), becoming rounded off so that the vessel is hardly more than a cylindrical Form 37.

The footstand is broad and approximately rectangular in section; whilst in earlier examples its exterior is furnished with several grooves (Pl. VII. 1, 2, 5-7), at a later period this technique is either absent or only sparingly represented (Pls. VII. 3, 4; VIII. 8).

In Claudian examples there is usually, as in Form 29, a "step" on the basal exterior at the point where the footstand joins the basal centre of the vessel (Pl. VII. 1).

In early vessels the footstand is of considerable breadth relatively to the size of the bowl. Later, the diameter of the footstand usually diminishes in its relationship to the size of the vessel (cf. Pl. VII. 1 and 4).

The chief *internal* feature to be noticed is the presence of a well-marked horizontal fluting situated at a somewhat higher level than the external fluting already described. It is an invariable characteristic of early and first-century bowls (Pl. VII. 1, 2), and may be compared with the internal grooving of Form 29, also occasionally met with in early examples of Form 37. In typically second-century bowls this internal fluting is rarely present, but its vestiges persist in the form of a minute groove. On the other hand, the internal wall may be quite smooth (Pl. VII. 4).

#### 4. *Technique.*

The glaze of the earlier examples of Form 30 is particularly lustrous and glossy. In a few of the oldest specimens it may possess the dull matt character of Augustan-Italic Sigillata, as in the Colchester bowl 1659.08 (Pl. X. 5). Subsequently and particularly in the Antonine period the glaze is often very poor, concomitantly with a thickening and progressive coarsening of the whole vessel.

#### 5. *Mode of Decoration.*

The ovolo ornament, almost invariably, forms an upper border to the design. In bowls of the Claudian and Neronian periods, and occasionally in Flavian times, no ornamental *motif* separates the ovolo from the general design of the wall of the vessel (Pl. VII. 1, 2, 5-7; Pl. VIII. 1-3).<sup>1</sup>

But with the advent of the Flavian period (especially in its latter half), as in some examples from Rottweil (Pl. VIII. 4; Pl. IX. 7, 8, 9 PAVLLI), a wavy line and less frequently a bead-row (Pl. VIII. 6) or other form of demarcation is present. This practice of demarcating the ovolo from the general design becomes the general practice in bowls of the second century, when the bead-row is the usual *motif* employed (Pls. VII. 3, 4; VIII. 7, 8).

<sup>1</sup> Rare exceptions to this rule occur (Pl. X. 1).



The device is evident in bowls of the transitional period, as in that by BVTRIO (Pl. VIII. 5) and the vessel from Strasbourg (Pl. VIII. 6), which exemplifies the typical mixed-metope decoration of the junction of the first and second centuries. The almost constant occurrence of this separating *motif* in Flavian examples of Form 37 demonstrates its chronological significance.

In the first century the decoration of the cylindrical bowl approximates closely to that of Form 29. The conformation of the bowl and the absence of any central horizontal moulding tends naturally to preclude any but very occasional attempts to arrange the ornamentation into two friezes or zones, *e.g.* at Hofheim (Ritterling, Abb. 51) and Aislingen (our Pl. XXVI. 8). The surface available for decoration is large compared with that afforded by Form 29, and, consequently, when the design is purely or mainly ornamental, the tendrils, buds and leaves are generally larger.

In the second century the designs are practically the same as those found on contemporary examples of Form 37.

The following are the chief decorative *motifs*:

(a) Upright plant ornament; a series of repeated separate ornaments, usually in the form of a narrow upright conventional plant or leaf, connected below by arcs mutually intersecting, as in some older examples of Form 29 (Pl. IX. 1, Hofheim I.). This type of decoration is early, and did not persist into the Flavian period. It is derived from an Italian prototype (Pl. XXIV. 10), and may be traced back to earlier times (see Hamlin, *History of Ornament*, Figs. 118 and 120, vases from Cyprus and Melos).

Sometimes very early bowls display an upright plant ornament in palmette form arranged in arcades (Pl. VIII. 1, Strasbourg). The upright plant-ornament with conjoined or intersecting arcs is also found on the crater, Form 11 (Knorr, *Terra Sigillata*, 1919, Pl. 41 G).

(b) Continuous scroll; a continuous, sharply bent scroll with large leaves and buds is particularly characteristic of the earlier bowls (Pl. VII. 1, Hofheim I.).

In the Claudian period at Hofheim this *motif* is frequent. At an early date an independent vertical plant, bird (Ritterling, *op. cit.* Pl. XXVII. 19), or small animal may be placed in the concavity of the scroll as in the bowl by the Claudian potter MASCLVS (Pl. VIII. 2) and in that from Bedfordshire (Pl. VIII. 3). A somewhat later type of this scroll decoration is illustrated in the fragment from Margidunum (Pl. IX. 5). The scroll and leaf *motif* persisted down into Flavian times, as in the later period at Hofheim (Pl. VII. 7), at York (May, *York*, Pl. I. Fig. 9) and Rottweil (Pl. VIII. 4). Here, however, figure-subjects, such as large animals, combats of gladiators, etc., form a considerable element in the design. At York and Rottweil the "arrowhead," so typical of Flavian ornamentation, appears as an infilling of blank spaces. At a somewhat early date the concavities of the

scroll may be filled in with a number of "six-bladed tufts," as in the bowl from Strasbourg (Pl. VII. 6). This *motif* has already been noted on a fragment of Form 29 found at Margidunum (p. 70).

In the Claudian period a two-leaved garland or winding wreath is sometimes added to the scroll design (Pl. VIII. 2, MASCLVS F). But this garland is more frequent in the Flavian period, either as an added element (Pl. VII. 7; Pl. VIII. 4) or as the sole ornamental *motif* (Pl. IX. 6, GERMANI). In all these examples figures of men or animals occupy a considerable space in the design. An intermediate type is represented on Pl. IX. 5.

(c) Panel or metope decoration; the division of the decoration into panels or rectangular metope-like areas by means of vertical wavy lines or bead-rows (usually formed by the lateral upright bordering of a St. Andrew's Cross) occurs at an early date, and is found in the Claudian period at Hofheim (Pls. VII. 5; IX. 2).<sup>1</sup> It is also found in the MASCLVS bowl (Pl. IX. 4) recently discovered in King William Street, London, of, perhaps, a somewhat later date. Occasionally, in addition to the wavy lines or bead-rows, the panels are further separated by upright wreath *motifs*, as in the Gaulish crater from Hofheim (Pl. IX. 3) and the cylindrical bowl from Colchester (Pl. X. 3, MASCLVS type), or by an upright scroll, as in the early fragment from Margidunum (Pl. XXV. 10), a *motif* which in this instance closely resembles certain details of the *Ara Pacis Augustae* (cf. Figs. 10 and 11, Pl. XXV.). The upright wreath, as a separating *motif*, persisted into the second century (Pl. VII. 4). The usual designs, which at an early period occupy the panel spaces, consist of a St. Andrew's Cross alternating with a plant and figure or figure-ornament. This combination is found in the short-lived Gaulish crater, Form 11, in the Claudian period at Hofheim (Pl. IX. 3) and in contemporary examples of the cylindrical bowl (Pls. VII. 5; IX. 2). An even earlier and probably pre-Claudian example of the same alternation of figure and cruciform ornament is seen in the Colchester example of Form 30 (Pl. X. 5). A modified panel scheme also occurs in the Gaulish crater by VOLVS (Pl. XIX. 1). According to Ritterling (*op. cit.* p. 225) the St. Andrew's Cross ornament appeared first of all on Form 30, and was subsequently adopted as one of the *motifs* of the lower frieze of Form 29. Its occurrence on the early bowl at Colchester supports this view. The elements of this ornament already existed in Arretine ware (Pl. II. 7) and in certain Aco-beakers (Pl. XXVI. 13). It is, therefore, probable that it was copied and developed on the Gaulish crater and early examples of Form 30 previously to its adoption as a decorative scheme for Form 29, the oldest examples of which vessel are totally devoid of this ornamentation (see our Pl. III. 4-8).

In the Claudian period the lower space formed by the bifurcation of the Cross may be filled with a group of imbricate pinnate leaves (Pl. IX. 2).

<sup>1</sup> See also a bowl in the style of INGENVVS (Knorr, *Terra Sigillata*, 1919, Pl. 41H).

At about the same date "arrowheads," so typical of the Flavian age, may occur as an infilling (Pl. IX. 4, MAS).

Panel decoration continued in favour through Flavian times into the Antonine period, and the following sequence of our figures illustrates the consecutive chronological changes in this scheme (Pls. VII. 5; IX. 2, 4; X. 3; IX. 7-10; VIII. 6; X. 6; VIII. 7; VII. 3; X. 7). The chief change to be noted in the Flavian period is the addition of horizontal demarcating lines, which are generally furnished with little rosettes at the points of junction or intersection with the vertical bordering already described. The so-called *divided metope* is also first met with in the Flavian period as at Newstead and Rottweil (Pl. IX. 7-10).<sup>1</sup> It is a characteristic feature of this mode of decoration that some of the panels no longer occupy the entire depth of the ornamented surface, but are divided into more numerous rectangular spaces by horizontal wavy lines or bead-rows. Here it may be noted that the substitution of bead-rows for wavy lines is, in the main, characteristic of the second century (Pls. VII. 3; VIII. 7; X. 7).

The *undivided metope* may, however, persist into the second century, as in the bowl by DIVIXTVS (Pl. VIII. 7) and in that from Newstead II. (Pl. X. 7). The presence of "arrow-heads" in conjunction with the divided metope may be regarded as strong presumptive evidence of Flavian origin. Although quite common in bowls of the "turn" of the first and second centuries (Pls. VIII. 6; X. 6), the cruciform ornament is less frequent at a later period, and then usually exists in an attenuated form (Pl. VIII. 7).

The detached festoon is a frequent element of metope-decoration, dating from the junction of the first and second centuries and extending down into the Antonine period (Pls. VII. 3; VIII. 6; X. 6).

In the Hadrian—Antonine periods large medallions containing plant or figure ornaments occupy a considerable space in the metope scheme (Pls. VII. 3; X. 7). With the passage of time, and more particularly in the second century and in Lezoux ware, the panels become more persistently filled with figure-subjects, largely of a mythological character (Pls. VII. 3; VIII. 7; X. 7). Figures of a more or less mythological origin began, however, to be common in the late Flavian period (Pl. IX. 7, 8, 10); occasionally they are found on the earliest examples of this bowl (Pl. X. 2, 5). Caryatides occupying some of the metope compartments are especially characteristic of DIVIXTVS (Pl. VIII. 7).

(d) Arcading; the ornament consists of arcades, either isolated or in a repeated series, filled with plant or figure-subjects or with both. It is found in some of the earliest bowls, as in the Strasbourg and Colchester vessels (Pl. VIII. 1; Pl. X. 5), and on a somewhat later bowl at Speier (Knorr, *Terra Sigillata*, 1919, Pl. 42 M).

<sup>1</sup> Although chiefly occurring in the late Flavian and Trajanic periods, the divided metope was in vogue sufficiently early to be found at Pompeii (Atkinson, *Pompeii*, 14 MOMMO, 50, 53, 55, 58-60, 67, 74 MEMOR, 76) on bowls of Forms 29 and 37.



It is, however, most characteristic of the Flavian period, as at Newstead I. (Pl. VII. 2), when it is not infrequently associated with the cruciform ornament, as at Corbridge, Hofheim II. and Cabeza del Griego (Bushe-Fox, *Arch.* 64, Fig. 31; Ritterling, *Hofheim*, Pl. XXVII. 9; Déchelette, i. Fig. 73). But this association is evidently of an earlier origin (Pl. X. 5).

Arcading was continued on Form 37 into the final period at Trèves in the third century.

(e) Free-style occurred early on Form 30, and is probably traceable to the reign of Nero (Pl. XXVI. 8, probably by BASSVS and COELVS). It is clearly in evidence in the Flavian period (Pl. IX. 6 GERMANVS; Pl. X. 4 GERMANVS). The bowl by BVTRIO (Pl. VIII. 5) dates to the junction of the first and second centuries. This scheme is also present at Luxeuil (Pl. XXIX. 11) and at Westerndorf (Pl. VIII. 8) datable to the late second century.

(f) A repeated geometrical or net-like design may occur early, as in the first period at Hofheim <sup>1</sup> (Pl. X. 1), and would appear to have been inspired by the lattice pattern not uncommonly found on the pottery of early Gaulish sites, such as Mont Beuvray. Its immediate predecessor is seen on the Aco-beaker (Pl. XXIII. 13).

It is more frequent in the second century, as at Wroxeter and Silchester (Pl. X. 8, 9).

This scheme is not uncommon on Form 37 in East Gaulish ware of the early second century (Pl. XVII. 3 SATTO; see also Forrer for IANVS of Heiligenberg).

#### 6. *Potters' stamps.*

Potters' stamps are not particularly frequent on this form. They occur on the exterior of the vessel amongst, below, or above the decoration.

#### 7. *Incidence.*

The incidence of this vessel is greatest in the Claudian—Neronian period. In Flavian times it is not so frequent, and although present in the later period at Hofheim, the early period at Newstead and at Rottweil, it has, as yet, not been recorded at Pompeii.

It is not represented in the Bregenz "Cellar-Find" (c. 80-110 A.D.), where its place appears to have been usurped by its short-lived variant, Form 78, a bowl or beaker especially typical of the Flavian and perhaps early Trajanic periods.

Form 30 again becomes comparatively common in the Antonine period, when coarser, thick-walled and rather deep cylindrical bowls were manufactured by such potters as ALBVCIVS and CINNAMVS. As already mentioned, it is still present in the Trèves and Westerndorf potteries.

It was occasionally produced in "marbled" technique (Pl. XXVIII. 9 CALVS F, Mannheim Museum). In the second century it was reproduced in glass (Du Chaillu, *Viking Age*, i. Figs. 628, 629, 631-3, 650-4).

<sup>1</sup> The example found at Leicester (Pl. XXVIII. 4) is also pre-Flavian.

The following list of stamps confirms the life-history of the bowl, as already described:

*POTTERS' STAMPS ON FORM 30.*

Whenever there is sufficient evidence that two or more potters worked under the same name, the fact is indicated by the prefix (i), (ii), etc.

The period of the potter's greatest activity, whenever ascertainable, is inserted after the site of his pottery.

British sites of provenance are marked in italics.

Moulds are marked in italics and bracketed.

Newstead II. signifies the Antonine occupation.

B.M. signifies British Museum.

K.W.St. signifies King William Street, London.

ADVOCISVS	(Lezoux, Trajan—Antonine) ADVOCISI Moulins.
(ii) ALBINVS	(La Graufesenque, Nero—Vespasian) <i>ALBINI Silchester, Mainz.</i>
ALBVCIVS	(Lezoux, Middle Second Century) <i>ALBVCi Lezoux, Silchester.</i>
AQVITANVS	(La Graufesenque, late Tiberius—Nero) OF AQVITANI Vindonissa.
(ii) ATTIANVS	(Lezoux, Antonine) ATTIAN [O] <i>Newstead II.</i>
BVTRIO	(Lezoux, Domitian—Trajan) BV] TRIO <i>London B.M. ; BVTR Silchester.</i>
CALENDIVS	CALENDI OF Rouen.
CALVS	(La Graufesenque, Nero—Domitian) CALVS F Roanne, Mannheim (marbled).
CARANTINVS	(Lezoux, Trajan) CARANTINI Lezoux.
CINNAMVS	(Lezoux, Hadrian—Antonine) CINNAMI Lezoux ( <i>mould</i> ), <i>Colchester, Corbridge, London B.M., Margidunum ; CINNAM Carnuntum.</i>
(i) COBNERTVS	(Lezoux, Flavian—Trajan) COBNERTVS Sèvres, Regensburg ; COBNERT (?) 78 Druisheim.
COMITALIS	(Rheinzabern, Antonine and later) COMITALIS FC Vienna (see LATINUS).
M CRESTIO	(South Gaul, Domitian—Trajan) M CRESTIO Bregenz.
DIVIXTVS	(Lezoux, Trajan—Antonine) DIVIX F <i>Castor, Corbridge, London B.M., Wroxeter ; DIV[ Silchester.</i>
DOECCVS	(Lezoux, Trajan—Antonine) DOECCI Lezoux, <i>London B.M., Silchester.</i>

GERMANVS	(La Graufesenque, Nero—Vespasian) GERMANI F Vindonissa ; GERMANI Rottweil, Riegel.
IANVARIS	(Lezoux, Trajan) IANVARISO Lezoux ( <i>mould</i> ).
LATINNVS	(Rheinzabern, Antonine) LATINNI on 30 by COMITIALIS FC Vienna.
MASCLVS	(La Graufesenque, Claudius—Vespasian) MASCLVS F London B.M., Vienna, Asberg ; MASCLVS Vienne ; MAS London K.W.St. ; MA London B.M.
MOMMO	(La Graufesenque, Claudius—Vespasian) OF MO Vindonissa.
PATERNVS	(Lezoux, Hadrian—Antonine) PATERN FE Lezoux, Rouen ; PATE]RNI M Lezoux.
(i) PAVLLVS	(La Graufesenque, Claudius—Domitian) PAVLLI Rottweil, Wiesbaden. The decoration is of Flavian type.
PECVLARIIS	(Lezoux and East Gaul, Hadrian—Antonine) PECVLIA FE Mainz.
PVTRIVS	(Lezoux, Trajan) PVTRIV Lezoux ; PV] TRIV Cusset.
(i) SABINVS	(La Graufesenque, Flavian) SABINI La Graufesenque.
SERVVS	(Lezoux, Trajan—Antonine) SERV M Lezoux ( <i>mould</i> ).
VOLVS	(South Gaul, Tiberius—Claudius) VOLVS Autun.

## DRAGENDORFF FORM 37.

## THE HEMISPHERICAL DECORATED BOWL.

1. *Distinguishing Features.*

The essential characteristics of this form consist of the hemispherical contour, the plain band beneath the lip (a half-round moulding), and a relatively flat footstand. It is somewhat exceptional to find any trace of the internal grooving which is invariably present in the carinated bowl, Form 29, and in early examples of Form 30.

2. *Period and Evolution.*

Appearing first of all in the reign of Nero (Ritterling, *Hofheim*, p. 231), it rapidly achieved popularity and became the predominant decorated bowl of the second century. Furthermore, it continued to be manufactured right down to the close of the period of decorated Terra Sigillata (Oelmann, p. 25). This late date of its production applies, however, more particularly to the East Gaulish potteries. At Lezoux it would appear to have been extensively superseded towards the end of the second century and the



beginning of the third century by *appliqué* ware (Déchelette, ii. 167), which is described in a subsequent chapter.

Notwithstanding the very general adoption from the earlier bowl, Form 29, of its ornamental schemes and types, as well as the occasional occurrence in Form 37 of potters' stamps on the basal interior (Déchelette, i. Nos. 74, 172, 173),<sup>1</sup> no evident relationship exists between the forms of these two vessels. A closer developmental influence can be traced back to the larger examples of the plain hemispherical Gaulish Sigillata bowl, Ritterling, Type 8 (*q.v.*). But utility and convenience, rather than any definite prototype, would appear to have been the dominant factors in the evolution of this form. At the same time, the possible influence of Megarian and Arretine hemispherical bowls must not be overlooked, for, although a footstand is wanting in these earlier types, many of them present a plain zone beneath the rim, and some examples even possess a rudimentary lip (Pl. XXIII. 1-5).<sup>2</sup> The hemispherical Arretine crater, Type C (Pl. XXVI. 1, 2), may also have exerted some developmental influence.

Form 37 established itself so readily in favour that already by 79/80-86 A.D., *i.e.* at Newstead I., it had become the principal type of decorated bowl. The rapidity of its acceptance is furthermore demonstrated by the fact that only four or five examples were found in the Vespasian period at Hofheim (74-80 or 83 A.D.), whereas at Pompeii a late consignment of South Gaulish Sigillata, dated to 77-79 A.D. (Atkinson, *Pompeii*, p. 28), contained an appreciably higher proportion of this bowl relatively to the earlier Form 29, viz. 54 examples of Form 37 to 36 examples of Form 29.

If the evidence from Cannstatt may be accepted, it would appear that on this site, first occupied in 84 A.D., Form 37 had already completely replaced the earlier type, Form 29. Indeed, towards the end of the first century the hemispherical bowl had practically supplanted the carinated decorated vessel, for examples of the latter only occur sporadically at this epoch.

With a few notable exceptions, such as Forms 64, 65, 68, etc. (*q.v.*), the hemispherical bowl together with later examples of Form 30 held the field of ornamented Sigillata during the second century.

At Niederbieber (190-260 A.D.) it is still plentiful as an East Gaulish product, and here it remained in vogue down to the close of the occupation.

This date would indeed appear to mark the end of this vessel as a true type of moulded Sigillata.

The form, however, persisted into the fourth century, but at this period the ornamental reliefs had become displaced by zones of striated rectangles, etc., yielding a chequered appearance (Pl. XI. 5; see also Chapter IX. (vi)).

<sup>1</sup> FELICI OF, SECVNDINVS, SECVNDI.

<sup>2</sup> A Chalcidian hemispherical bowl with handles in the Naples Museum shows a still closer resemblance to Form 37, for it exhibits

not merely the half-round moulding of the lip, but it possesses a very definite and similar footstand.

### 3. *Development.*

*General considerations.* The plain, undecorated band or zone beneath the lip usually becomes broader or deeper in the later examples (cf. Pl. XI. 1, 2, 6-8 with Pl. XI. 3, 4 and Pl. XII. 1-4, 6). Concomitantly with this change the whole vessel in general becomes coarsened and the lip markedly thickened.

Below the plain band an "egg and tongue" or "ovolo" ornament forms an upper border to the design. Occasionally its place is taken by other *motifs*, and this is especially the case in East Gaulish ware (Pls. XIII. 3; XVII. 8; XVIII. 6, 8). An ovolo of circles appears, however, almost invariably on bowls of this form by the potter LIBERTVS (Pl. XXVI. 14 and Déchelette, i. p. 185); but it is quite unusual to find any digression from the normal type of ovolo in the fabric of South Gaul.<sup>1</sup>

On the whole, the early examples of this vessel are relatively small, but small bowls continued to be produced even in the early part of the second century.

*Decoration.* For convenience the decoration is studied here under successive periods—a procedure which necessarily incurs a certain amount of overlapping and repetition.

(a) *Flavian period.* The early bowls, viz. those of the Vespasian and early Domitian periods, exhibit the same general types of decoration as those already in use in Form 29, viz.:

#### (i) Transitional or zonal decoration.

An attempt is frequently made to imitate the double frieze or decorated zones of the earlier bowl. This method of ornamentation is well exemplified in the earliest examples of Form 37, as found at Hofheim II. and Pompeii (Pl. XI. 1, 6). In the former case we find two friezes, an upper and a lower, ornamented respectively with the familiar "arrow-heads" and figure-subjects and with a continuous winding scroll. The S-ornament (already described as occurring on Form 29), repeated in series, forms a lower bordering to the design. In the example from Pompeii a row of beads (so frequently met with on Form 29) is visible below the ovolo; and below the bead-row we find two friezes separated by a straight wreath—the upper frieze filled with a row of oval ornaments and the lower frieze consisting of a continuous winding-scroll with arrow-heads in its concavities.

Many good examples are figured in Atkinson's paper (*Pompeii*), in Curle's *Newstead* and in Bushe-Fox's monograph in *Archæologia*, 64; see also our Pl. XIV. 1, 2, 5-7; Pl. XV. 3. These illustrations, both in details of scheme and decoration, are highly reminiscent of the ornamentation of earlier and contemporary examples of the carinated bowl.

<sup>1</sup> See section on Ovolo Types.

As we have already seen in the case of Form 29, much of the decoration is purely ornamental. Animals and human figures are, however, introduced somewhat more freely in Form 37.

In dealing with the next period reference will be made to the fact that whilst the transitional type of decoration is particularly characteristic of the Flavian period, it is sometimes present on the wares of potters whose activity extended into the reign of Trajan, as in the case of the bowl by MERCATO (Pl. XX. 1) and even later.

(ii) Panel or "metope" decoration.

Panel or "metope" decoration makes its appearance at quite an early date in one or other of the friezes of these transitional bowls, *e.g.* at Hofheim (Pl. XI. 1, upper frieze) and at Pompeii (Pl. XIV. 3, 7). This is only to be expected, since the metope scheme had already become evolved on bowls of Forms 11, 29 and 30 at least as early as the Claudian period, as shown by their occurrence in the first occupation of Hofheim (Form 11, Pl. IX. 3; Form 29, Pl. VI. 6; Form 30, Pl. VII. 5). At a slightly later period—though still sufficiently early to appear at Pompeii (Pl. XV. 1, 5, 6)—the whole surface of the bowl may be occupied by ornaments arranged in compartments ("metope" scheme), with the exception of an occasional upper or lower bordering by a straight wreath. This form of decoration is not infrequent in the Domitian period, as at Newstead I. (Pl. XI. 8) and Carlisle (Bushe-Fox, *Arch.* 64, 10). It is not seldom met with in the later products of South Gaul (Pl. XIX. 7 CRVCVRO), and perhaps more particularly in those of Banassac (Pl. XIX. 3).

In the earlier metope-ornament of Form 37 the panels are sometimes filled with alternating medallions and cruciform ornament, as at Pompeii (Pl. XV. 6 MEMOR; see also Atkinson, *op. cit.* 74). This type of metope (as mentioned in a previous section) had already appeared on the lower frieze of Form 29 in the Claudian period. Generally speaking, however, even in the Vespasian period this alternation of medallion and St. Andrew's Cross is not strictly carried out, and additional *motifs* are introduced (Pl. XV. 5 MOMMO (?); Atkinson, *op. cit.* 55, 60, 78).

In the metope ornament of the Domitian period the figure-subject is often represented as standing on a small tuft of grass or running over it, as at Newstead I. (Pl. XI. 8). The Domitian potters BIRACILLVS and L. COSIVS greatly favoured the use of this ornament, which appears to be especially characteristic of late South Gaulish work (Pl. XIX. 5 BIRACILLVS).<sup>1</sup> Although absent from the decorated bowls found at Pompeii, this grass-tuft is sometimes found on one or other of the friezes of Form 29 (Pl. V. 1), where it may or may not be associated with a fan-like plant-ornament interrupting the continuity of a series of animals in motion (Pl. V. 7


<sup>1</sup> It may be noted that this grass tuft is represented on a Pompeian fresco beneath a dog chasing a hare (Pl. XXXVI. 32).



RVFIVS). This latter *motif* is not infrequent at Pompeii and Newstead I. (Pl. XIV. 1, 3; Pl. XV. 3) on Form 37, and is of common occurrence in the Flavian period. The "fan-like" plant (possibly a degraded and degenerate palmette) is probably somewhat earlier in origin than the "grass-tuft." It is found on bowls of Form 29 by PASSENVS, COELVS, PONTVS, SEVERVS, RVFINVS, COSIVS RVFVS and CRVCVRO, and on bowls of Form 37 by MERCATOR and L. COSIVS VIRILIS.

Although the *horizontally divided metope* is found at Pompeii on both Form 29 (Atkinson, *op. cit.* 14 MOMMO) and on Form 37 (Pl. XV. 1, 5 and Atkinson, *op. cit.* 53, 55, 58-60, 67, 74, 76), it becomes more frequent in the reign of Domitian, *e.g.* at Newstead and Carlisle (Pl. VI. 7 and 9 on Form 29) and later. It is a characteristic feature of the work of the late-Domitian potter CRVCVRO (Pl. XIX. 7). As in Form 30, the panels may be separated by an upright straight wreath in addition to the usual wavy line (Pl. XV. 5).

(iii) A rather large continuous scroll.

A rather large continuous scroll, with its concavities occupied by arrow-heads, conventional plants or figure-subjects, is also frequent in the Flavian period, as at Pompeii (Pl. XV. 4) and Margidunum (Pl. XV. 2; Pl. XIV. 4). This scroll occupies the entire decorated surface with the common exception of a straight wreath or other ornament (*e.g.* the  figure, Pl. XIV. 4) either above or below. It is obviously a copy of the continuous scroll so frequently met with on Form 29.

(iv) Free-style.

Free-style decoration is found in the Flavian period, as exemplified by the work of GERMANVS (Pl. XI. 7). This potter, rather than LIBERTVS, must be regarded as one of the earliest practitioners of this method of ornamentation. He was followed and closely imitated by the somewhat later potter BIRACILLVS (Pl. XIX. 5). In the work of both of these potters, animals, free in the field, occupy the upper frieze of a transitional or zonal scheme of decoration. A *genre* scene by GERMANVS is illustrated on Pl. XX. 2.<sup>1</sup> As has already been pointed out, early instances of free-style are exemplified in a bowl, Form 29, found at Silchester (Pl. XIX. 2), a Form 29 from Aislingen (Pl. XXVI. 7 GENIALIS) and a Form 30 from the same site (Pl. XXVI. 8, style of BASSVS COELVS).

It should be particularly borne in mind that all the above-mentioned styles of decoration and ornamental details are to be found on the carinated bowl, Form 29. They are entirely of first-century origin, and are demonstrably the outcome of the potteries of La Graufesenque and other localities in South Gaul. At the same time attention must be drawn to the fact

<sup>1</sup> A similar fishing scene occurs on a bowl, Form 29, by the earlier potter MELVS (Knorr, *Terra Sigillata*, 1919, Pl. 56B).

that many of these types continued to be produced, generally in a modified form, both at Lezoux and at the East Gaulish potteries.

(b) *Trajanic period.* At the "turn" of the first and second centuries evidence of considerable changes in the decorative designs of Sigillata potters begins to appear.

Although the influence of South Gaul is generally apparent, and indeed strongly marked in some cases, ornamental designs commence to take a subordinate position and are largely superseded, especially in Lezoux fabric, by human and mythological figure-subjects.

(i) Transitional or zonal decoration is frequent in the bowls of *LIBERTVS* (Déchelette, i. Nos. 39, 40, etc.). The work of *SATTO*, who appears to have carried the traditions of La Graufesenque into East Gaul, not infrequently displays this method (Fölzer, Pl. V. 1; Knorr, *Cannstatt*, Pl. II. 2; see also our Pl. XVII. 4). The work of the somewhat later potter *IANVS* occasionally exhibits this style (Forrer, Pl. XXVII. 5), and a bowl in the style of the potter *ALBILLVS* has a triple zone (Pl. XVII. 2). Indeed a double or even a triple zone is not uncommonly met with in East Gaulish ware of a later date (Fölzer, Pl. XIV. 1, 10, 23).

(ii) Panel or metope decoration continued down to practically the end of the decorated Sigillata period, e.g. in the work of the Trèves potters of the *ALPINVS* school (Oelmann, Pl. VII. 15).

The panel decoration of the bowls of the Trajanic period, as found at Bregenz, illustrated on Pl. XVI. 1-3, is obviously inspired by South Gaul, and is almost demonstrably the work of potters of this region. Here many South Gaulish types are seen, e.g. the running and sitting hare, Diana and biga, the small figure carrying a "torch," Diana and the small hind, the man playing the double flute, the grass-tufts, the winged Victory and the cruciform ornament, etc. The wavy line separating the decoration and demarcating the panels is also a highly characteristic feature of South Gaulish work.

Yet if this plate (XVI.) is compared with figures illustrating the typical metope-decoration of the Flavian period (Pl. XIV. 3, 7; Pl. XV. 1, 5, 6), the general effect is distinctly different and readily recognisable. It will be noticed that the divided metope is constantly present, that the festoons are not continuous but detached, and that the corner-tendrils, so characteristic of Flavian work, are either absent or occur in the form of sessile leaves, or are only represented by mere rudiments. The panel decoration of the East Gaulish potters *SATTO* and *IANVS* (Fölzer, Pl. IV. 8; Knorr, *Cannstatt*, Pl. II. 1, 2; Knorr, *Rottenburg*, Pl. XI. 1) displays a definite resemblance to the designs of the later South Gaulish potters *BIRACILLVS* and *L. COSIVS*. The metope scheme of decoration was also employed by the Lezoux potters *LIBERTVS* (Déchelette, i. Nos. 22, 23, etc.) and *BVTRIO* (Pl. XX. 4).

(iii) A winding-scroll of true South Gaulish type is not uncommon in the work of SATTO (Pl. XX. 3). The Luxeuil "potter of the helmet and shields," whose date is conjectured to be late Domitian-Trajan, also produced bowls ornamented in this style (Pl. XVII. 1). His cuneiform and spurred leaf is likewise reminiscent of South Gaul.

A later and more conventional type of winding-scroll is represented in a bowl by IANVS (Pl. XIII. 2).

(iv) Free-style is frequently met with in the work of potters of the "turn" of the first and second centuries. Amongst those of Lezoux, the most consistent exponents of this style are BVTRIO and LIBERTVS.

The scheme may occupy the whole decorated surface of the bowl, as in a vessel by BVTRIO (Pl. XII. 2) and in that in the style of LIBERTVS (Pl. XX. 5); or, on the other hand, it may be arranged in two zones or friezes, as in many examples by LIBERTVS (Déchelette, i. Nos. 40, 41, 42, etc., and see our Pl. XXVI. 14).

The bowl by SATTO (Pl. XVII. 4) is interesting as an illustration of the manner in which a decorative scheme was handed down from one potter to another. It is obviously inspired by the work of the Vespasian potter GERMANVS, probably handed down through the medium of BIRACILLVS. If the figures XI. 7 GERMANVS, XIX. 5 BIRACILLVS and XVII. 4 SATTO are compared, the same transitional scheme of decoration is found in all with free-style in the upper zone and a continuous festoon in the lower zone.

The East Gaulish potter SATVRNINVS, who shows considerable affinities to SATTO, was also an exponent of this style (Fölzer, Pl. V. 14).

(v) Many decorative details characteristic of South Gaulish work, such as the wavy line separating the ovolo border from the decoration, "grass-tufts," the St. Andrew's Cross ornament, corner-tendrils, arrow-heads bounded by diagonal wavy lines (Fölzer, Pl. IV. 6), etc., continued to be produced by the early East Gaulish potters, particularly by those of Luxeuil and by SATTO.

These features are less frequently met with in the products of Lezoux.

(vi) Geometrical patterns, such as diamond-shaped spaces filled with rosettes or a network of bead-rows with rosettes at their junctions, are not uncommon in East Gaulish ware. This style was employed by the potters SATTO (Pl. XVII. 3) and IANVS (Forrer, Pl. XXV. 1). Its prototype is found in Claudian examples of Form 30 (Pls. X. 1; XXVIII. 4).

(c) *Hadrianic period.* The decorative types of this period, whilst partaking to some extent of the characteristics of the above described, approximate more closely to those of the Antonine epoch (*q.v.*). A cylindrical bowl by DIVIXTVS (Pl. VIII. 7) may be regarded as representing a common type of Hadrianic decoration.



(d) *Antonine period.* When the typical decoration of the Antonine period (Pl. XII. 4) is contrasted with that characteristic of the first century (Pl. XI. 1), a remarkable difference becomes at once apparent. Designs of a purely ornamental character have largely disappeared. The "arrow-heads," so typical of the Flavian period, are no longer found. The oblique wavy lines, so favourite a *motif* in the last quarter of the first century, are only rarely present. The continuous festoon is only of exceptional occurrence (Curle, *Newstead*, p. 225, 2; Oelmann, Pl. VI. 21, 23), but it is not infrequent as a detached unit. The straight wreath forming a lower border to the design is seldom present in Lezoux ware, but it is not uncommon in East Gaulish fabric, even that of a late date (Oelmann, Pl. VII. 8, 13, 16, 24 and Pl. VIII. 21).

But perhaps the most striking feature is the preponderance of figure-subjects, especially those of a mythological character. This statement applies more particularly to the ware of Central Gaul. In East Gaulish work, with a few notable exceptions, a repetition of ornament—often quite meaningless in its purport—is not uncommon. In the ware of this district, figure-subjects, both mythological and contemporary, are not infrequent, but they usually occupy a secondary position (Pls. XII. 6; XIII. 1, 6, 7; XVIII. 7). On the other hand, the decorated ware of the Trèves potters CENSOR (Pl. XVIII. 2) and DEXTER (Pl. XVIII. 3) often reaches a high degree of merit.<sup>1</sup>

The chief decorative types of the Antonine period are as follows: <sup>2</sup>

(i) The continuous winding-scroll, a large variant of which bears testimony to the persistence of an early ornamental type (Pl. XII. 3 CINNAMVS). The concavities of the scroll are usually occupied by large medallions (Pl. XII. 3) or by animals free in the field (Déchelette, i. Pl. XI. 3). This style is comparatively frequent in Central Gaulish ware of the middle of the second century (Curle, *Newstead*, p. 223, 4, 5; p. 225, 1, 3, 4, 7). At this period leaf- and tendril-ornament is also often met with, occurring in detached units (Curle, *op. cit.* p. 221, 6).

In a conventionalised form (cable pattern) the large winding-scroll is not uncommon in East Gaulish ware (Pl. XIII. 2) of the second century and the beginning of the third century, as at Niederbieber (Pl. XI. 4; see also Oelmann, Pl. VI. 26 style of CENSOR).

(ii) The cruciform ornament, so characteristic of the Flavian period of South Gaul, continued to be produced at Lezoux (Déchelette, i. pp. 184, 185). In the Hadrianic period it has in general become modified by a process of attenuation and relative elongation (Pl. VIII. 7 DIVIXTVS). In the Antonine epoch the process had undergone a further evolution, and the

<sup>1</sup> See Chapter II. (ii) C on "East Gaul," and Chapter VI. "Origin and Development."

<sup>2</sup> Many of these types or their elements

were continued down to the middle of the third century, as will be noticed by subsequent incidental references.

familiar St. Andrew's Cross not infrequently presents merely the appearance of a double or opposed *fleur-de-lys* (Curle, *Newstead*, p. 221, 6).<sup>1</sup>

It is still not uncommon in the work of the early East Gaulish potters SATTO and SATVRNINVS (Fölzer, Pl. XXVII. 258, 259, 260 A), but it is infrequent in late East Gaulish ware.

(iii) Panel- or metope-decoration was the predominant type of ornamentation adopted by the potters of Lezoux in this period, and it is almost invariably associated with figure-subjects enclosed in *large medallions*.

The bowl by CINNAMVS (Pl. XII. 4) from Newstead II. well illustrates the prevailing type of Central Gaulish decoration in the middle of the second century; a large medallion enclosing a figure occupies one of the panels, whilst the smaller panels are filled with various figures. The *divided metope* still persists, and here its upper compartment encloses a detached festoon.

In East Gaul the true metope-style of decoration is infrequently met with in the Antonine and later periods. In a modified form, however, it is not uncommon, *e.g.* on the bowls by B. F. ATTO (Pl. XIII. 6) and VALENTINVS (Pl. XIII. 7).

(iv) The free-style of the Antonine period is well illustrated at Newstead II. (Curle, *Newstead*, p. 227, 1) and in the bowl by PATERNVS (Pl. XII. 1), both from Central Gaul. The representation of a definite and connected scene is no longer attempted, and the rocks upon which animals stand or stride in the Flavian and early examples are now represented merely by meaningless spindle-shaped ornaments.

A still higher degree of degeneration is visible in the free-style of the East Gaulish potters COMITALIS (Pl. XIII. 4) and CIBISVS (Pl. XIII. 5), as well as in that of TORDILO (Pl. XVIII. 4) and the ALPINVS school of Trèves (Pl. XVIII. 6).

(v) Arcade-decoration. A repeated series of arcades enclosing figure-subjects is not uncommon in Lezoux fabric of this period (Déchelette, i. Pl. X. 3). It was adopted by the potters of Westerndorf in the second half of the second century, and is not uncommon in East Gaulish ware (Fölzer, Pl. VII. 27, 53, 57; Pl. VIII. 1, 5; and our Pl. XVII. 5), persisting into the third century, *e.g.* at Niederbieber (Oelmann, VII. 24, 33).

It should be borne in mind that this scheme of decoration was of South Gaulish origin, and that it occurs on early (Pl. VIII. 1; Pl. X. 5) and on Flavian examples of Form 30 (Pl. VII. 2), and rarely on Form 29 (May, *Silchester*, Pl. XI. 25).

The general trend of development of decoration in the third century, viz. in East Gaul, resulted in a somewhat confused mixture in which free-style—a heterogeneous jumble of disconnected subjects—occupied a

<sup>1</sup> Occasionally a large St. Andrew's Cross is found on wares of the middle of the second century.

considerable place (Oelmann, Pls. VI. VII. VIII.). Figs. 7, 8, 9 on our Pl. XVIII. illustrate the later stages of the Trèves Sigillata industry, and the dying efforts of its branches. In Figs. 7 and 9 we represent the "daisy" or rosette pattern, so frequently found impressed on the *pseudo-sigillata* of later sites such as Pevensey.

#### 4. Form 29/37.

Attention may here be drawn to the hybrid vessel which possesses some of the distinctive features of both the carinated and hemispherical bowls.

It resembles the carinated bowl, Form 29, in retaining the characteristic central moulding and presenting a varying degree of eversion of the rim.

On the other hand, its affinity to the later vessel, Form 37, is shown by its approximately hemispherical contour and its pronounced half-round lip beneath which a plain band surmounts the decorated area.

This transitional form was made by the potters at Lezoux (Déch., i. Figs. 101 and 108; also No. 53 by LIBERTVS), and more especially by the early workers of East Gaul (Pl. XII. 5 "Potter of the small medallions," Heiligenberg; Pl. XVIII. 1 Trèves).

The ornamental elements in both the above-noted bowls suggest that the potters derived their inspiration from South rather than Central Gaul.

The date of production of these hybrid vessels may be assigned to the later years of the first century and early part of the second century.<sup>1</sup> They were imported into Britain, and have been found at Corbridge (*Arch. Æl.* 2nd series, ix. p. 280, Fig. 24), Nether Denton (Bushe-Fox, *Arch.* 64, Fig. 25) and in the eastern counties (Haverfield, *Proc. Soc. Antiq.* 2nd series, xxiv. p. 35).

Attention is further directed to the two carinated vessels, Figs. 10 and 12, Pl. XXVIII., which may be assigned to the "turn" of the first and second centuries. Both exhibit transitional elements; thus in the interesting bowl, Fig. 10, now in the Leicester Museum, the inferior of the two mouldings which normally compose the rim of Form 29 is represented by a sharp ridge, whilst the lip is of the well-marked semi-circular type found in Form 37.

The decorative types are chiefly those of Central and East Gaul (Crane, Déch. 991; Cupid, Déch. 236; Siren, Fölzer 149 SATTO, (?) Déch. 499).

On the other hand, the bead-rows which almost invariably border the central moulding in Form 29 are replaced by the wavy lines so commonly met with as a demarcating *motif* in Flavian examples of the hemispherical bowl. The vessel, Fig. 12, by the East Gaulish potter RANTO also bears

<sup>1</sup> Mr. Donald Atkinson, who has examined the Plicque collection from Lezoux, is of opinion that some examples of this form 29/37 in this collection strongly suggest by their decoration a second century date.



evidence of transitional changes in its singly moulded rim and its pronounced lip.

Here, too, decorative variations are to be seen in the peculiar rouletting of the rim and the replacement of the usual bead-row, demarcating the upper limits of the superior frieze, by a chevron wreath.

5. A variant of Form 37 with inturned rim, viz. Déchelette's Form 70, is illustrated on our Pl. XXVIII. Fig. 14. Its decoration belongs to the Domitian-Trajan period.

In Form 37 potters' stamps occur amongst, below or above the decoration.

### POTTERS' STAMPS ON FORM 37.

The appended list of representative potters may be found useful.

Whenever there is sufficient evidence that two or more potters worked under the same name, the fact is indicated by the prefix (i), (ii) or (iii), etc.

In the present state of our knowledge this grouping is somewhat arbitrary and may subsequently require revision.

The period of each potter's greatest activity, whenever ascertainable, is inserted after the site of his pottery. Moulds are underlined.

British sites of provenance are marked in italics.

Brit. Mus. signifies British Museum.

G.P.O. signifies General Post Office, London.

Newstead I. signifies Flavian occupation.

Newstead II. signifies Antonine occupation.

ABBO (Rheinzabern, Trajan—Antonine) ABBO FE : mould  
Speyer, Munich ; — 37 Rheinzabern.

ACASTVS (Lezoux, early) ACAS : mould Lezoux.

ADVOCISVS (Lezoux, Hadrian—Antonine) ADVOCISI : moulds  
Lezoux and Vichy ; — 37 *London* (Guildhall),  
*Silchester*, *Wroxeter* (ADVO[. . . .]), *Corbridge*,  
*Lancaster*, *Colchester*, Lezoux, Lubié, Vichy,  
Moulins, Cusset, Vienne, Amiens, Aurillac,  
Poncins, Brotonne.

AFER (Trèves, second century) AFER FECIT : Eller.

AGISILLVS (Westerndorf, Antonine) AGISILLVS F : Western-  
dorf, Vienna.

ALBILLVS (La Madeleine, Trajan—Hadrian) ALBILLVS F :  
Inheiden.

(iii) ALBINVS (Lezoux, ?) ALBINVS : Toulon-sur-Allier.

ALBVCIVS	(Lezoux, Hadrian—Antonine) ALBVCI : <u>mould</u> Lezoux ; — 37 London (Brit. Mus., Guildhall, G.P.O.), Hengistbury, Wroxeter, Corbridge, Silchester, Saltersford, York, Cirencester, Chesterford, Margidunum, Vendeuil, Poncins, Mandeure, Compiègne, Breteuil, Moulins, Lezoux, Vienne, Angers, Amiens.
ALPINVS	(Trèves, end of second and beginning of third century) ALPINI FORM : Dalheim.
AMATOR	(Trèves, end of second and beginning of third century) AMATOR : Andernach.
ANTISTII	(Lezoux, ?) ANTISTIORVM : <u>mould</u> Toulon-sur-Allier.
ARCANVS	(Lezoux, Trajan—Antonine) ARCANVS : Moulins, Rottenburg, Cannstatt.
ARVERNIVS	(Rheinzabern, Trajan—Hadrian) ARVERNIVS : Rheinzabern.
ATENIVS	(Lezoux, ?) ATENIVS : <u>mould</u> Lezoux.
(ii) ATTIANVS	(Lezoux, Antonine) ATTIANO : Corbridge (A)TTIAN O), Saintes. ATTIA[ : Wroxeter. ATTIANI : Besançon. ATTIAN[ : Newstead II.
(iii) ATTIANVS	(Rheinzabern, Hadrian—Antonine) ATTIANVS F : York. ATIANVS F : Kapersburg, Alteburg. ATIANVS : <u>mould</u> Rheinzabern.
(ii) ATTILLVS	(Rheinzabern, Antonine) ATTILLVS F : <u>mould</u> Rheinzabern. ATTILLV : <u>mould</u> Rheinzabern ; — 37 Pfünz, Stockstadt, Heddernheim, Köngen, Friedberg. AITILLVS : (on exterior of <u>mould</u> of LIBERALIS) Rheinzabern. ATTILL[ : Mainhardt.
ATTIVS	(Lezoux, Trajan—Hadrian) OF ATT : <u>mould</u> Lezoux ; 37 Silchester, Wroxeter, Corbridge, Holt, Trion, Lyons, Rottweil, Friedberg.
B. F. ATTO	(Rheinzabern, Antonine) ATTO : on <u>mould</u> of COMITIALIS FC Rheinzabern ; — 37 Zugmantel. ATTO FECIT : Rheinzabern, Xanten, Zugmantel, Jagsthausen. ATTO FECIT : <u>mould</u> Rheinzabern. B. F. ATTONI : <u>moulds</u> Rheinzabern and Munich ; 37 York, Corbridge (. . .)ONI), Pfünz, Ems,

Weissenburg, Wald Bossert, Augsburg, Zugmantel, Xanten, Faimingen, Mainz, Rheinzabern, Speyer, Saalburg.

- AVENTINVS (Lezoux, Antonine) AVENTINI M: *Newstead* II. AVENTINI: *London* (Guildhall). AVENTIN[: Rouen. AVENTI: *Corbridge*.
- AVGVSTALIS (Rheinzabern, Antonine) AVGVSTALIS: mould Rheinzabern.
- AVGVSTINVS (Rheinzabern, Hadrian—Antonine) AVGVSTINVS: Rückingen. AVGVSTINV: Rheinzabern.
- (ii) AVITVS (Lezoux, ?) AVITVS F: *Colchester, Corbridge, Heidelberg*. AVITI: mould Lezoux; 37 Heidelberg; *appliqué figure-stamp* Lezoux.
- (iii) AVITVS (Rheinzabern, Hadrian—Antonine) AVITVS FEC: *London* (Guildhall), Rheinzabern, Rückingen. AVITVS F: Rheinzabern, Rückingen, Gr. Krotzenburg.
- (iv) AVITVS (Eschweilerhof, Antonine) AVITI F: Köngen, Osterburken, Zugmantel, Gr. Krotzenburg, Rückingen, Wimpfen, Mainz, Vienna, Heddernheim, L.A.L.: Eschweilerhof, Trèves, Worms, Mainz, Zugmantel, Altstadt, Nymwegen, *York*. L.A.A.: Eschweilerhof, Mainz, Zugmantel, Gr. Krotzenburg, Altstadt, Osterburken, Saalburg. L.A.A.: Worms.
- AVNVS (Lezoux, ?) AVNI: mould Lezoux.
- AVSTRVS (Lezoux, Trajan—Hadrian) AVSTRI OF: mould Lezoux; *figure-stamps* Lezoux, Clermont-Ferrand, Geneva; — 37 Lezoux, Rouen, *London* (Brit. Mus.). AVSTRI: Heidelberg.
- Q. I. BALBINVS (Lubié, ?) Q. I. BALBINVS: Lubié.
- BANVVS (Lezoux, Hadrian—Antonine) BANVI M: Clermont-Ferrand. BANVI: mould Lezoux; — 37 Lubié, Rezé, *York, London* (Brit. Mus.). BAN[: *Corbridge*.
- (ii) BASSVS (Lezoux, ?) BASSI: Lezoux.
- BELATVLLVS (Westerndorf, Antonine) CSS BELATVLLVS F: Westerndorf. CSS BELATVLLVS: Westerndorf.



BELSVS	(Heiligenberg and Rheinzabern, Antonine) BELSVS F: <u>moulds</u> Rheinzabern, Jupille, Stuttgart; — 37 Aquileia, Mainz, Jupille, Rheinzabern Kapersburg, Arnsburg, Heiligenberg, Köngen. BELSVS: Mainz, Rottenburg, Zugmantel.
BIRACILLVS	(Banassac, Domitian—Trajan) BIRACIL: Rotten- burg, Cannstatt, Riegel. BIRACI: Vichy.
BIRRANTVS	(Lezoux, ?) BI]RRANTVS: <u>mould</u> Lezoux.
BORILLVS	(Lezoux, Hadrian—Antonine) BORILLI M: <u>mould</u> Lezoux; 37 Lezoux, Pfünz.
BOTVS	(Trèves, ?) BOT[: Trèves.
BOVDILLVS	(Avocourt, Antonine) BOVDILLVS FEC: Mainz. BOVDILL[: Rouen.
BVTRIO	(Lezoux, Trajan) BVTRIO: <u>mould</u> Lezoux; 37 <i>London</i> (Brit. Mus. and Guildhall), <i>Silchester</i> , <i>Chester</i> , <i>Arlesey</i> , <i>Leicester</i> , <i>Corbridge</i> (EVIRIO), Lezoux, Bourges, Mans, Tronöen, Lisieux, Paris, Vechten, Nymwegen, Pfünz (. . .]TRIO).
CALENVS	(Lezoux, ?) CALENVS F: <i>York</i> .
CALETVS	(Lezoux, Antonine) CA]LETI M: <u>mould</u> Lezoux; — 37 <i>Silchester</i> , St. Germain.
CAMBO	(Eschweilerhof, Hadrian—Antonine) CAMBO: Trèves, Heddernheim, Oehringen, Osterburken, Frank- furt, Vechten.
CARANTINVS	(Lezoux, ?) CARANTINI M: <u>mould</u> Lezoux.
(ii) CASILLVS	(Lubié, ?) CASILL[: Lubié.
(ii) CASTVS	(Rheinzabern, Hadrian—Antonine) CASTVS F: Rheinzabern, Faimingen, Osterburken.
CASVRIVS	(Lezoux, Antonine) CASVRIVS: <i>Corbridge</i> .
(ii) CATVS	(Trèves, second century) CATVS: Kapersburg, Trèves.
CATVSSA	(Lezoux, second century) CA]TVSSA MA: <u>mould</u> Lezoux. CATVSSA: Lezoux, Feldberg.
(ii) CENSORINVS	(Lezoux, Trajan—Hadrian) CENSORIN: Rouen. CENSOR[: Dieppe. CENSO[: <i>Corbridge</i> . CESO- RINI: <u>mould</u> Lezoux; — 37 Lezoux, <i>Chester</i> .
(iii) CENSOR	(Trèves, end of second century and beginning third century) CENSOR: Trèves, Marienfels, Dal-

heim, Mainz, Miltenberg, Heddernheim, Bonn, Gellep, Arentsburg, Vechten, Andernach, Niederbieber, Holzhausen, Echzell, Zugmantel, Altstadt, *London* (Brit. Mus. Walters, M. 2279 CENS]OR). CNSOR : Oberbilk. CENSO : Trèves.

(i) CERALIS (Lezoux, Trajan—Hadrian) CERIA[ : mould Lezoux ; — 37 *Corbridge*.

(ii) CERALIS (Rheinzabern, Antonine) CERALIS F : moulds Rheinzabern, Speyer (with CONSTAENI), Bregenz, Strasbourg, Munich, Mainz, Cologne, Giessen, Rottenburg ; — 37 Marienfels (with REGIN F on rim), Mainz, Speyer, Rottenburg, Oehringen, Rheinzabern, Miltenberg, Saalburg, Bingen, Gr. Krotzenburg, Wels, Heiligenberg. CERAL F : mould Rheinzabern ; 37 Rheinzabern, Augsburg, Neuhaus, Heiligenberg, Rheinzabern (with DEVRSS[. ). CERALIS : moulds Rheinzabern, Speyer, Stuttgart ; mould (with STABILIS) Speyer ; — 37 Rheinzabern, Rottweil, Rinschheim, Pfünz, Zugmantel, Echzell, Wald Bossert, Mainz, Badenweiler, Wallstadt, Rottenburg, Heiligenberg, Amiens, *London, York*. CERALIS : mould Rheinzabern ; moulds (with CONSTAENI) Speyer and Zugmantel ; — 37 Osterburken, Rheinzabern (with COMITIALIS FC).

CHRESIMVS (Montans, Flavian) CHRESIM : *Wroxeter*.

CIBISVS (Luxeuil and Ittenweiler, Trajan—Antonine) CIBISVS FECIT : Ehl. CIBISVS FEC : Luxeuil, Ittenweiler, Mandeure, Vicques, Rottweil, Riegel, Badenweiler, Zugmantel, Altstadt, Augst, Eschenz, Mühlau, Enge (Berne), Bingen, Königshofen, Rottenburg, Studenberg (Berne). CIBISVS F : Avenches.

CINGES (Westerndorf, Antonine) CINGES F : Westerndorf.

CINNAMVS (Lezoux, Hadrian — Antonine) CINNAM OF : *Wroxeter, London, Lezoux, Moulins, Larème* (Vichy), Lubié, Vichy, Riom, Nantes, Bavai, Vienne, Bourges, Troyes, Evreux, Crêt-Chatelard, Lillebonne, St. Marcel, Rottweil. CINNAM M : *Leicester, Silchester, London* (Brit. Mus. handle). CINNAM : mould Lezoux ; — 37

- Lezoux, Clermont-Ferrand, Vichy, Lubié, Crêt Chatelard, Trion, Ste. Colombe, Brou, Angers, Chartres, Nantes, Rouen, Caudebec, Châteaubleau, Moulins, Védrines, St. Marcel de Felines, Vendeuil-Caply, Amiens, Bolar, *Newstead II., London* (Brit. Mus., G.P.O.), *Wroxeter, Aldborough, Barhill, Corbridge, Cirencester, Colchester, Leicester, Silchester.* CINNAMVS: *London* (Brit. Mus.), Moind (Loire). CINNAM: Cusset. CINNA: *Camelon.*
- CINTVSMVS (St. Bonnet, Lavoye, Ittenweiler and Rheinzabern, Hadrian—Antonine) CINTVSMVS F: *Corbridge, Westerndorf, Vienna, Carnuntum.* CINTVSMVS: Pfünz. CINTVSMI M: Klagenfurt.
- CIRIVNA (Heiligenberg, Trajan—Antonine) CIRIVNA F: Trèves, Rottweil, Rottenburg, Vienna, Cannstatt, Faimingen. Heiligenberg, Strasbourg, Zugmantel, Knielingen, Riegel, Baden-Baden, Passau, Weissenburg.
- (i) COBNERTVS (Lezoux, Flavian—Hadrian) COBNERTVS: *York, London* (Guildhall), Cannstatt, Zugmantel. COBNERTI: *Silchester.* COB: *London* (Brit. Mus.).
- (ii) COBNERTVS (Rheinzabern, Hadrian—Antonine) COBNERTVS FE: Mainz. COBNERTVS F: mould Rheinzabern, Zweibrücken, Erbach, Mainz, Vindonissa and Ghent; mould (with MARTINI) Rheinzabern; mould (with MARMARTINI) Rheinzabern; 37 Rheinzabern, Atzelburg, Augsburg, Jagsthausen, O-Szöny, Pfünz, Zugmantel, Ladenburg, Rottenburg, Alteburg, Speyer, Neuheim, Neupfotz, Carnuntum, *Corbridge*<sup>1</sup> (COBN]ERTVS F). COBNERTVS: Rheinzabern, Alteburg. COBNERTI: Rheinzabern, Faimingen, Osterburken.
- COMITIALIS (Rheinzabern, Heddernheim and Westerndorf, Antonine and early third century.) COMITIALIS FEC: Ems. COMITIALIS FE: Rheinzabern, Mainz, Kapersburg (with LATINNI), Gr. Krotzenburg, Niederbieber, Wiesbaden, Faimingen, Friedberg, Altstadt, Pfünz, Walldürn, Baden-Baden, Mandeuere. COMITIALIS FC: Speyer (mould with IOVENTI), Speyer (mould with LATINNI), Speyer

<sup>1</sup> Lezoux or East Gaul.



(mould with SECVNDINAVI), Speyer (mould with PERVINCVS), (mould with COSTIO) Mainz and Munich; — 37 Wiesbaden (with LATINNI), Rheinzabern (with CERIALIS), Rückingen, Jagsthausen, Heddernheim, Cannstatt, Saalburg, Wiesbaden, Rheinzabern, Mandeure, Montbéliard. COMITIALIS F: Friedberg, Idstein, Mainz, Heddernheim, Miltenberg. COMITIALIS F: mould Rheinzabern; — 37 Rheinzabern, Westerndorf, Mainz, Heddernheim, Wiesbaden, Gr. Krotzenburg, Augsburg, Bonn, Alteburg, Osterburken, Saalburg, Marköbel, Worms, Stuttgart, Rottweil, Niederbieber, Rottenburg, Neckarburken, Köngen, Deutz, Arentsburg, *London* (Brit. Mus.), *York*, Zugmantel (with LATINNI). COMITIALIS: Rheinzabern, Westerndorf, Mainz, Heidelberg, Cannstatt, Pfünz, Geislingen, Neckarzimmern, Echzell, Rinschheim, Walheim, Feldberg, Neuwied, Rückingen. COMITIALI F: mould Rheinzabern; 37 Rheinzabern, Niederbieber, Faimingen. COMITIAL FC: Wiesbaden. COMITIAL F: Niederbieber, Wiesbaden, Günzburg, Westerndorf (with CSS EROT, CSS ER and CSS MAIANVS). COMITIA FE: Holzhausen, Trèves, Oberbilk. COMITIAL: *London* (Brit. Mus.). COMITIA: II. Neuwied. COMITIALI: Miltenberg, Vechten.

COMPRINNVS	( ) . . . ]PRINNI: <i>Corbridge</i> .
CONDO . . .	( ) CONDO[. . . : <i>Corbridge</i> .
CONSTANS	(Heiligenberg and Rheinzabern, Hadrian—Antonine) CONSTANS F: Ladenburg. CONSTAS F: Walheim, Pfünz (on rim), Heiligenberg (on rim of CIRIVNA bowl). CONSTAS: Mainz.
CONSTANTINVS	(Rheinzabern, Antonine) CONSTANTINI: Mainz. CONSTAENI: <u>mould</u> (with <u>CERIALIS</u> ) Rheinzabern and Speyer, <u>mould</u> (with <u>CERIALIS F</u> ) Speyer; — 37 Rottenburg, Rinschheim, Echzell, Wimpfen.
L. COSIVS and VIRILIS	(La Graufesenque, Vespasian—Trajan) COS OF L VIRI: Valløby (Denmark). L COSI: Rottweil, Saalburg.

- COSTIO (Rheinzabern, Antonine) COSTIO : mould (of COMITALIS FC) Rheinzabern; 37 Munich, Mainz.
- CRACVNA (Trèves, ) CRACV : Xanten.
- (ii) CRESTIO (South Gaul, Domitian—Trajan) M CRESTIO : *Holt*, Heddernheim, Günzburg, Weisenau (Mainz), Friedberg, Wiesbaden, Assche, Nymwegen.
- (i) CRICIRO (Banassac, Vespasian—Trajan) CRICIRO OF : Banassac.
- (ii) CRICIRO (Trèves, end of second century and beginning of third century) CRICIRO : *Arlesey*, Niederbieber, Neuwied, Kapersburg, Nuits-sur-Beaume, Saalburg, Trèves, Poitiers, *Silchester*.
- CRISTINVS (Lezoux, ?) CRISTINI MA : mould Lezoux.
- CRVCVRO (Banassac, Vespasian—Trajan) CRVCVRO : *London* (Brit. Mus.), *Cambridge*, *Newstead I.* (CRVC[VRO], Rottweil, Knielingen, Reims.
- CVRMILLVS (Lezoux, ?) CVRMILLI : mould Lezoux.
- I.C.N. I C N : mould Lezoux.
- DECMANVS (Lezoux, ?) DECMANI M : Lary (Allier).
- DEXTER (Trèves, end of second century and beginning of third century) DEXTRI : Trèves, Feldberg, Butzbach, Friedberg, Stockstadt, Wiesbaden (Kastel), Niederbieber, Saalburg, Altstadt, Bar-le-duc, Xanten, Heddernheim, Rückingen, Grand, Miltenberg, Mainz, Zugmantel, Bonn, Arentsburg. DEXTR : Mainz, Miltenberg, Butzbach.
- DIVIXTVS (Lezoux, Trajan—Antonine) DIVIX : *London* (Brit. Mus.). DIVIX F : *Newstead II.*, *London* (Brit. Mus.), *Silchester* (D]IVIX F), *Wroxeter* (DIVI]X F), *Corbridge*, *Saltersford*, *Camelon*, *Albury*.
- DOCCIVS (Lezoux, Hadrian—Antonine) DOCCIVS F : Vichy.
- (i, ii) DOECCVS or DOVECCVS (Lezoux and Lubié, Trajan—Antonine) DOECCI : mould Lezoux ; — 37 Lezoux, Vichy, Lubié, Poitiers, Vienne, Cusset, Digoin, Compiègne, Troyes, Mauriac, Rouen, Etaples, Moulins, *London* (Brit. Mus. and Guildhall), *Colchester*, *York*, *Lowbury Hill*, *Silchester*. DOECI : *Col-*

*chester. DOVECCVS : London (Guildhall), Clermont, Cusset, Poitiers, S. Shields. DOECCVS : Silchester, Corbridge (IICCVS and DIICC), Astwick. DD : <sup>1</sup> Lezoux, Clermont, Vienne, Blickweiler, Zugmantel, Cannstatt, Köngen, Vichy, Compiègne, Corbridge, Wroxeter, London (Guildhall), as ovolo, Colchester, Leicester, Lancaster.*

DOMITIANVS	(Kräherwald, first half of second century) DOMITIANVS F : <u>mould</u> Kräherwald ; — 37 Speyer, Cannstatt, Pfünz.
DRAVCVS	(Montans, Domitian—Trajan) DRAVCVS FECIT ET [? donavit ille] MAGENI [? filio] : Marcillat.
DRVSVS	(Lezoux, Trajan—Hadrian) DRVSVS : Angers, <i>Lancaster</i> . DRVSVSVS F : <u>mould</u> Lezoux. ]RVSVS F : <i>Colchester</i> .
ELENIVS	(Westerndorf, second half of second century) CSS ELENIVS F : Westerndorf. ELENIVS FEC : Westerndorf. ELENIVS F : Westerndorf.
HELENIVS	(Rheinzabern, Antonine) HELENIVS : Trèves, Zugmantel. HELENIVS FE : Speyer. HELENIVS F : Kastel. HELE[. . . : Rheinzabern.
ELIVS	(Lezoux, Antonine) ELIVS F : Lary, Toulon-sur-Allier. ELI M : Toulon-sur-Allier.
EPPILLVS	(Lezoux, Antonine) EPPILLI F : <u>mould</u> Lezoux. EPPILLII : <u>mould</u> Lezoux. EPPILLI : <u>mould</u> Lezoux. EPPILVS : <u>mould</u> Lezoux.
EROTVS	(Westerndorf, Antonine) CSS EROT (on COMITIAL F bowl) : Westerndorf. CSS EROT : <i>Liverpool, York</i> . CSS ER (on COMITIAL F bowl) : Westerndorf. CSS ER : Zweibrücken.
(i) FAVSTVS	(South Gaul, ?) FAVSTVS : Challans.
(i) FELICIO	(La Graufesenque or Montans, Claudius—Domitian) FELICIO : <i>Wroxeter, London</i> (Guildhall). FELICIOINIS : <i>Colchester</i> .
FELIX	(La Graufesenque and Montans, Claudius-Vespasian) FELICI OF : St. Germain.

<sup>1</sup>A potter who used the monogram DD (small) worked at the pottery of Blickweiler in the Palatinate in Hadrian's reign (Atkinson, *The Romano-British Site on Lowbury Hill*, p. 58).



- (ii) FIRMVS (Heiligenberg, Ittenweiler and Rheinzabern, Trajan—Antonine) FIRMVS FE : mould Rheinzabern ; — 37 Heiligenberg, Westerndorf, Ittenweiler. FIRMVS : mould Rheinzabern ; — 37 Mainz (with MELAVSVS on rim), Mainz, Cannstatt, Rottweil, Faimingen, Wiesbaden, Heddernheim, Oehringen, Augsburg, Rheinzabern, Speyer, Zugmantel, Pfünz, Brumath, Altstadt. FIRMI : *London* (Brit. Mus.). FERMVS : mould Rheinzabern.
- FLAVVS (Lezoux, ?) FLAVI O : *London* (Brit. Mus.).
- FLORENTINVS (Rheinzabern, second half of second century) FLORENTINVS FE : mould Rheinzabern. FLOR-  
ENTINVS F : mould Rheinzabern ; — 37 *Silchester*, Wiesbaden. FLORENTINVS : Messkirch.
- (i) FLORVS (Montans, ?) FLORI : St. Martin de Lesque.
- FORTVNATVS (East Gaul, ?) FORTVNATVS : Rottenburg.
- FRONTINVS (La Graufesenque, Flavian) FRONTINI : *Newstead I.*
- FVTRAT (Heiligenberg, Trajan—Hadrian) FVTRAT : Heiligenberg. F : Heiligenberg.
- GATVS (Heddernheim (?), ?) GATVS : Alteburg.
- GEMELLINVS (Vichy (?), ?) GEMELLINI M : mould Brugheas nr. Vichy.
- GEMELLVS (Rheinzabern, Antonine) GEMELLVS mould Rheinzabern.
- GEMELLVS ET SEVERIANVS (Rheinzabern, Antonine) SEVERIANVS GEMELLVS  
FECERVNT AMBO : mould Rheinzabern.
- (i) GERMANVS (La Graufesenque, Nero—Vespasian) GERMANI F : *Richborough*, Rottweil, Wels, Clermont-Ferrand. GERMANI : Nimes, Moulins, Varennes, Lavoye, Rottweil, Augsburg, Strasbourg.
- (ii) GERMANVS (Lavoye, Hadrian) GERMANVS F : mould Lavoye.
- (iii) GERMANVS (Westerndorf, end of second century) GARMANVS F : Westerndorf.
- GERMANI SERVVS (La Graufesenque, Flavian) GERMANI F SER : Rottweil, Baden-Baden. GERMANI F S : Wels. GERMANI SER : Rottweil.
- GESATVS (Lavoye, Hadrian) GESATVS : mould Lavoye.
- A. GIAMILVS (South Gaul, Domitian) A GIAMILVS : Rottweil.

## VESSELS DECORATED IN MOULDED RELIEF 115

- GRESTVS ET  
GERMANVS (South Gaul, Flavian) OF GRESTI GERMANI: Sulz.
- G.T.S. (Montans, ) G.T.S.: mould Toulouse.
- (i) IANVARIVS (La Graufesenque (?), ?) IANVARIVS: Neuss.
- (ii) IANVARIS (Lezoux, Trajan—Hadrian) IAN]VARIS: mould  
Lezoux. IANVARIS O: *Corbridge*. IANVAR: mould Lezoux. IANVARI: *Wroxeter*, Rouen.
- IANVCO (Rheinzabern, Antonine) IANVCO: mould Munich.
- IANVS (La Madeleine, Heiligenberg, Rheinzabern, Trajan—  
Antonine), IANV *F*: mould Rheinzabern; — 37  
with LVTAEVVS on rim Cannstatt, — with  
NOVANVS F on rim Cannstatt, with MAMILIANVS  
on rim Cannstatt; — 37 *London* (Brit. Mus.),  
*Nether Denton*, *York*, *Corbridge*, Rheinzabern,  
Rottweil, Ladenburg, Heidelberg, Rüdgingen,  
Rottenburg, Neupfotz, Worms, Neuhaus,  
Arentsburg, Königshofen, Zugmantel, Pfünz,  
Altenstadt, Köngen, Faimingen, Augsburg,  
Türkheim, Kapersburg, Winterthur, Riegel,  
Heidelberg. IANVS: Heiligenberg, Günzburg  
(rim with MAMILIANVS). IANVI: Riegel.
- ICVRNVS (?) ICVRNI: Ladenburg.
- ILLIXO (Lezoux, Trajan—Antonine) ILLIXO M: mould  
Lezoux. ILLIX M: mould Lezoux. ILLIXO:  
Rinschheim.
- INTERCED (East Gaul (?), end of second century) INTERCED  
NOLIVIAT: Niederbieber, Mainz.
- INTVSMVS (Westerndorf, end of second century) INTVSMVS:  
Westerndorf.
- IOENALIS (East Gaul, Trajan—Hadrian) IOENALIS F: *Col-*  
*chester*.
- IOVENTVS (Rheinzabern, second half of second century) IO-  
VENTI (on mould of COMITIALIS FC): Rheinza-  
bern and Speyer; — 37 Mainz, Cannstatt,  
Rottweil, Rheinzabern, Faimingen.
- (i) IVCVNDVS (La Graufesenque, Nero—Flavian) OF IVCVN:  
Mainz.

- (ii) IVLIANVS (Rheinzabern, Antonine) IVLIANVS F: Rheinzabern.  
IVLIANVS: mould Rheinzabern; — 37 Rheinzabern, Rottweil, *London* (Guildhall), Badenweiler.  
IVLIAN: Rheinzabern. M IVLIANI: mould Rheinzabern.
- IVLICCVS (Lezoux, Domitian—Trajan) IVLICCI M: mould Lezoux, 37 Lezoux. IVLICI M: mould Lezoux.  
IVLLICCI: mould Lezoux. IVLICCI: mould Lezoux. IVLLICCVS: mould Lezoux.
- (ii) IVLIVS (Rheinzabern, end of second century) IVLIVS FE: Rheinzabern, Kapersburg. IVLIVS F: mould Rheinzabern; — 37 Mainz, Kapersburg, *Jebsheim*, Osterburken, Faimingen, Neuss, *York*, *Corbridge* (SVIIV), Frankfort, Speyer, Zugmantel, Köngen, Rheinzabern. IVLIVS E: mould Rheinzabern; — 37 *Jebsheim*, Munich, Wiesbaden. IVLIVS: Rheinzabern.
- (ii) IVLLINVS (Lezoux, second century) IVLLINI: Lezoux, Moulins, St. Germain, Annécý, Rouen, *Leicester*, *Chesterford*. IVLLINI M: mould Lezoux.  
IVLLIN: mould Lezoux. IVLLI[. . .]: mould Lezoux.
- IVLLVS (La Graufesenque, Flavian) IVLLVS: *Alteburg*, *Colchester*.
- (ii) IVSTINVS (Rheinzabern, Antonine) IVSTINVS FE: mould Rheinzabern.
- (ii) IVSTVS (Lezoux, Hadrian—Antonine) IVSTI M: Lezoux, Vichy, St. Germain, Jublains, Moulins, Poitiers, Tronöen, Rouen, *Corbridge*, *London* (Brit. Mus.).
- IVVENIS (Rheinzabern, second half of second century) IVVENIS FE: mould (with PVPVS F) Rheinzabern; — 37 (with PVPVS F) *Rottenburg*; — 37 Rheinzabern, Faimingen. IVVENIS F: mould Munich; — 37 Rheinzabern, Faimingen, Neuss. IVVENIS: Rheinzabern. IOVENIS: mould Rheinzabern.
- LALVS (Lezoux, Trajan—Hadrian) LALVS F: mould Lezoux.
- LALLVS (Westerndorf, Antonine) LALLVS FEC: *Westerndorf*.



- LASTVCA (Lezoux, Hadrian—Antonine) LASTVCA F: Lezoux, Moulins, Rouen. LASTVCA: Cusset. LAST[...: *Corbridge*.
- LATINNVS (Rheinzabern, second half of second century) LATINNI (on mould of COMITALIS FC): Rheinzabern; — 37 Mainz, Neckarburken, Heddernheim, Oehringen, Neuss, Rüdcingen, Friedberg, Saalburg, Wiesbaden, Feldberg, Altstadt, Kapersburg, Rheinzabern, Rottweil, Miltenberg. VIC LATINI: *figure-stamp* Speyer.
- LAXTVCISSA (Lezoux, Trajan—Hadrian) LAXTVCIS F: mould Lezoux; — 37 *Water Newton, Wroxeter, Caistor, Besançon*; — *figure-stamps* Lezoux, Moulins, Paris, Bordeaux, Lyon. LAXTVCI E: *figure-stamp* Clermont-Ferrand. LAXTVCI: *Silchester*.
- (ii) LIBERALIS (Rheinzabern and Heddernheim, Antonine) LIBERALIS on mould of COMITALI F: Rheinzabern; — 37 Speyer, Heidelberg.
- (? ii) LIBERTVS (Lezoux, Vespasian—Trajan) OFFI LIBERTI: mould Lezoux: — *figure-stamps* Lezoux and St. Germain: — 37 Lezoux, Vienne, Angers, *London* (Guildhall). OF LIBERTI: mould Lezoux: — 37 Lezoux, Toulon-sur-Allier, St. Germain: — *figure-stamp* Venas (Allier). LIBERTI M: Vichy. LIBERTI: mould Lezoux: — 37 *Wroxeter, Silchester, Rotherley, Lezoux* (ovolo type), *Chester*.
- (ii) LVCANVS (Heiligenberg and Rheinzabern, Hadrian—Antonine) LVCANVS F: Heiligenberg, Rheinzabern, Speyer, Heddernheim, Faimingen.
- (i) LVCINVS (Lezoux, ?) LVCINI M: Paisy-Cordon (Troyes).
- (i) LVCIVS (Lezoux, ?) LVCI: mould Lezoux.
- (ii) LVPVS (Rheinzabern, second half of second century) LVPVS FE: moulds Rheinzabern, Speyer, Munich Cologne: — 37 Niederbieber, Wiesbaden, Saalburg, Gr. Krotzenburg, Butzbach. LVPVS F: Mainz, Frankfurt, Zugmantel.
- LVTAEVVS (Rheinzabern, Hadrian—Antonine) LVTAEVVS FEC: *Corbridge* (on rim). LVTAEVVS F: *London* (Brit. Mus.), Wels, Faimingen, Pfünz (on rim), Rottweil (on rim of REGIN F bowl), Cannstatt (on

- rim of IANVS F bowl), Cannstatt (on rim of SATTO bowl). LVTAEVVS: Cannstatt (on rim of IANVS F bowl). LVTAIVS F: *London*. LVTEVI: Rheinzaubern.
- (ii) MACCIVS (Lezoux, ?) MACCIVS: *figure-stamps* Lezoux, Vichy, Rouen; — 37 Lezoux.
- MAIIAAVS (Trèves, second half of second century) MAI IAAVS: Trèves, Niederbieber, Xanten, Zugmantel, Rückingen.
- (ii) MAIANVS (Westerndorf, second half of second century) CSS MAIANVS F: on rim of COMITALIS bowl, Westerndorf.
- MALCIO (Montans and Lezoux, Flavian) MALCIO: Lactoure.
- MAMMILLIANVS (Rheinzaubern, Hadrian—Antonine) MAMMILIANVS: on rim of IANV *F* bowl Speyer; on rim *London* (G.P.O.), Rheinzaubern, Pfünz; — 37 Mainz, Osterburken, Zugmantel, *Carlisle*. MAMILIANVS: Rheinzaubern, Pfünz, Günzburg, Osterburken. MAMMILLIAN F: Rheinzaubern. MAMMILIAN F: Altenstadt. MAMILIANVS: on rim of IANVS bowl Günzburg.
- MAMMIVS (Lezoux, ?) MAMMO: mould Lezoux. MAMMI F: *Corbridge*. MAMMI[. . . .]: *Corbridge*. MAMMI I: Nérès.
- MAPILLVS (Lezoux, Hadrian—Antonine) MAPILL OF: Lezoux, Aquileia. MAPIL[. . . .]: *Corbridge*.
- (ii) MARCELLINVS (Rheinzaubern, Antonine) MARCELLINVS: mould Rheinzaubern;
- (ii) MARCELLVS (Rheinzaubern, Hadrian—Antonine) MARCELLVS F: moulds Rheinzaubern, Speyer, Mainz; — 37 Mainz, Rheinzaubern, Osterburken, Rückingen, Oehringen, Köngen.
- (ii) MARINVS (Heiligenberg and Rheinzaubern, Hadrian—Antonine) MARINVS F: Cannstatt, Oehringen, Stuttgart. MARINVS: Mainz.
- (ii) MARTIALIS (East Gaul, Antonine) MARTIALIS FE: Neuss.
- (ii) MARTINVS (Rheinzaubern, Antonine) MARTINI (on mould of COBNERTVS F): Speyer.

- (ii) MARTIVS (Lezoux and Lavoye, Trajan—Antonine) MARTI O : Clermont-Ferrand. MARTI : St. Germain. MARTI[ : mould Lavoye.
- MATERNIANVS (Lezoux and Westerndorf, second century) MATER-  
NIAN F : Westerndorf. MATE[. . . : *Corbridge*.
- MEDDILLVS (La Graufesenque, Nero—Flavian) ME@ILLVS :  
Neuss.
- MELAVSVS (Rheinzabern, Trajan—Hadrian) MELAVSVS F : (on  
rim) Mainz. MELAVSVS : Mainz ; — (on rim  
of FIRMVS bowl) Mainz and Cannstatt.
- (ii) MELVS (Trèves, second century) MELVS FECIT : Trèves.
- MEMOR (La Graufesenque, Nero—Vespasian) MEMORIS :  
Pompeii, *Chester*.
- (i, ii) MERCATOR (Montans, later at Lezoux and Heiligenberg,  
Domitian—Antonine) MERCATOR M : mould  
Lezoux ; — 37 Marcillat. MERCATO : Saintes,  
Tours, Rottweil, Baden-Baden, *Silchester, London*  
(Guildhall). MIRCATO : Poitiers. MERCATOR :  
*Wroxeter* (on mould of CINNAMVS), *Chester*,  
*Silchester*, Baden-Baden. MERC : *Caerleon*.
- MINVSA (East Gaul, ?) MINVSA : *Chester*.
- MOMMO (La Graufesenque, Claudius—Vespasian). MOM :  
Pompeii.
- MORIRVFINVS (? , Antonine) MORIRVFINVS FEC : Osterburken.
- (i, ii) MOXSIVS (Lezoux, Domitian—Hadrian) MOXSIVS : mould  
Lezoux ; — 37 Xanten. MOXI MA : *Wroxeter*,  
*London*.
- MVSCELLA (Westerndorf, second half of second century) MVS-  
CELLA F : Westerndorf.
- NAMILIVS ET (Lezoux, ?) NAMIL CROESI : mould Lezoux.  
CROESVS
- (i) NATALIS (Banassac, Flavian) NATALIS : Rottweil.
- NICIO (Montans, Flavian) NIC[. . . : mould Montans.
- NOCTVRACVS (Westerndorf, second half of second century) NOC-  
TVRAC F : Westerndorf.
- NOMVS (Montans, Flavian) NOM : Montans.
- NOVANVS (Heiligenberg, Hadrian) NOVANVS F : Cannstatt  
(on rim of IANV *F* bowl) ; — Rottenburg.



PARATVS	(Montans, Neronian) PARATI M: <u>mould</u> Montans
PATERCLVS	(Lezoux, Domitian—Trajan) PATERCLI: <i>Silchester</i> .
PATERNIANVS	(Rheinzabern or Trèves, second century) PATER- NIANV: Trèves.
PATERNVS	(Lezoux, Hadrian—Antonine) PATRNII (=PATERN FE of Déchelette): <u>mould</u> Lezoux; — 37 Lezoux, Clermont-Ferrand, Marcillat, Vichy, Moulins, Moind, Nérès, Reillac, Nantes, Jard, Toulouse, Compiègne, Troyes, Albens, Vierine, Chartres, Sanxay, Tours, Angers, Le Mans, Aix en Othe, Sens, Bar le Duc, Rouen, Amiens, Paris, Reichenhall, <i>Warrington, Wroxeter, Col- chester, Corbridge, Silchester, Wingham</i> (Brit. Mus.), <i>Hengistbury, London</i> (Guildhall). PATERNI M: <i>Wroxeter</i> , Angers, Lezoux, Lyons.
(i) PAVLVS or PAVLLVS	(La Graufesenque, Claudius—Domitian) PAVLVS F: Moulins.
(ii) PAVLLVS	(Lezoux, Antonine) PAVLLI M: <u>mould</u> Lezoux. PAVLLI: <u>mould</u> Lezoux; — 37 <i>Leicester</i> . PAVLI: <u>mould</u> (with SEDATVS) Lezoux.
PEINTIVS	(Westerndorf, second half of second century) PEINTIV[: Westerndorf. PENTIVS FEC: Wes- terndorf.
(ii) PEREGRINVS	(Rheinzabern, Antonine) PEREGRINVS: Rheinza- bern, Mainhardt. PEREGRINI: Rheinzabern. PEREGRIN: Cannstatt.
PERPETVS	(Rheinzabern, Hadrian—Antonine) PERPETVS FIL: <u>mould</u> Munich. PERPET: <i>London</i> (Guildhall).
PERVINCVS	(Rheinzabern, Antonine) PERVINCVS F: <u>mould</u> Rheinzabern. PERVINCVS: <u>moulds</u> Rheinza- bern and Munich; — <u>mould</u> of COMITALIS F bowl (with SECVNDINAVI on rim) Speyer; — 37 Zugmantel, Heddernheim, Alteburg.
PICI ANDECCA- ROM OB	(? = Figulini Andeccarom opus): Faimingen.
PLAVTINVS	(Lezoux, ?) PLAVTINI: <u>mould</u> Lezoux.
PRIMITIVOS	(Rheinzabern, Antonine) PRIMITIVOS F: <u>moulds</u> Rheinzabern and Munich; — 37 Wiesbaden,

Rheinzabern, Zugmantel, Altstadt, Rückingen, Trèves, Faimingen. PRIMITIVOS: Rheinza-  
bern.

- PRIMITIVS (Rheinzabern, Antonine) PRIMITIVS FEC: mould  
Rheinzabern. PRIMITIVS FE: mould Rheinza-  
bern. PRIMITIVS F: mould Rheinza-  
bern; — 37 Mainz, Köngen, Speyer, Rheinza-  
bern, Faimin-  
gen, Jagsthausen, Kapersburg, *Silchester*.  
PRIMITIVS E: moulds Rheinza-  
bern, Speyer,  
Mainz and Munich; — 37 Mainz, Eckartsbrunn,  
Holzhausen, Zugmantel, Atzelberg, Köngen,  
Rheinza-  
bern, Faimingen, Kapersburg. PRIMITI:  
Rheinza-  
bern.
- PRIMVS (La Graufesenque, Claudius—Vespasian) PRIMI:  
*Wroxeter*.
- PRISCINVS (Lezoux, ?) PRISCINI M: mould Lezoux.
- PRISCVS (Lezoux, second century) PRISCI M: mould Lezoux;  
— 37 Vichy.
- PVPVS (Rheinzabern, second half of second century)  
PVPVS F: mould (of IVVENIS FE) Rheinza-  
bern,  
moulds Rottenburg and Stuttgart; — 37 Gr.  
Krotzenburg, Rheinza-  
bern, Speyer, Mainz,  
Arnsburg, Jagsthausen, Pfünz. PVPVS: mould  
Rheinza-  
bern; — 37 Würtemberg, Rheinza-  
bern,  
Niederbieber, Rinschheim, Zugmantel.
- PVTRIVS (Lezoux, Trajan—Hadrian) PVTRIV: Lezoux,  
Moulins, Vichy, St. Germain, St. Paul d'Uzor,  
*Corbridge* (PVTRI).
- QVINTILIANVS (Lezoux, ?) QVINTILIANI M: mould Lezoux; — 37  
Lezoux, Mainz. QVINTILIANI: Mainz.
- REGINVS (Heiligenberg and Rheinza-  
bern, Trajan—Antonine)  
REGINVS FECIT: moulds Mülhausen and Heiligen-  
berg; — 37 Rheinza-  
bern, Mainz. REGINVS  
FEC: Speyer, Rheinza-  
bern, Wiesbaden, Mainz,  
Baden i/Aargau, Adolfseck. REGINVS F:  
Heiligenberg, Faimingen, Rheinza-  
bern, Rotten-  
burg, Köngen, Carnuntum, O-Szöny. REGNVS  
F: Rheinza-  
bern, Heiligenberg, Strasbourg,  
Unterbobingen, Heddernheim, Butzbach, Saal-  
burg, Mainz, Rückingen, *London* (Guildhall).

	REGINV F: Rheinzabern. REGIN F: <u>moulds</u> Rheinzabern, Kräherwald, Heiligenberg, Mülhausen, Köngen; — (on rim of <u>mould</u> of CERIALIS) Marienfels; — 37 Mandeure, Rheinzabern, Riegel, Rottweil, Ittenweiler, Heiligenberg, Pfünz, Enge (Berne), Köngen, Wimpfen, Heddernheim, Cannstatt, Wels, Faimingen, <i>Crocolana</i> (Brough). REGINVS: Ladenburg, Zugmantel, Wimpfen, <i>Corbridge</i> REG[INVS].
REGVLINVS	(Rheinzabern, Hadrian—Antonine) REGVLINVS: Zugmantel. REGVLINVS F: <u>mould</u> Solothurn.
RENTIVS	(Lezoux, ?) RENTI M: Vertault.
REPANVS	(Heiligenberg, Rheinzabern and Westerndorf, Hadrian—Antonine) REPANVS F: Westerndorf. REP: (only with COMITIALIS) <u>mould</u> Rheinzabern; — 37 Heddernheim, Rheinzabern, Butzbach, Enge (Berne), <i>Chesterford</i> .
RESPECTINVS	(Rheinzabern, Antonine) RESPECTINVS F: <u>mould</u> Rheinzabern. RESPECTINVS: <u>mould</u> Rheinzabern; — 37 Zugmantel.
RESPECTVS	(Rheinzabern, second half of second century) RESPECTVS: Rheinzabern, Zugmantel. RESPECTV: <u>mould</u> Rheinzabern. RES: <u>mould</u> Munich.
(i) RVFINVS	(La Graufesenque, Nero—Domitian) OF RVFIN: <i>Colchester</i> . RVFI[...]: Montans.
(i) RVFVS	(La Graufesenque and Montans, Flavian) RVFFVS FE: <i>Leicester</i> .
(i) SABINIANVS	(Lezoux, ?) SABINIAN[...]: Cusset.
(i) SABINVS	(La Graufesenque and Montans, Flavian) I SABINI: <i>London</i> (Brit. Mus.). SABIN[: <i>Corbridge</i> .
SACER	(Lezoux and Heiligenberg, Trajan—Antonine) OFI SACRI: <i>Silchester</i> , Cusset, <i>Wroxeter</i> (OFI SACRI[1]). OF SACRI: <i>figure-stamp</i> Lezoux. C. C. SACRI: Cologne. SACER F: Vienne. SACER E: Beaune. SACER: Coblenz.
SACIRO	(Lezoux and East Gaul, second century) SACIRO F: Westerndorf.
SACRILLVS	(Lezoux, second half of second century) SA]CRILLI M: <i>Wroxeter</i> .



- SATTO (Upper Moselle district, Domitian—Hadrian) SATTO  
FECIT : Trèves, Pförling, Cannstatt, Bonn,  
Speyer, Neckarburken, Zugmantel, Köngen,  
Mainspitze, Heidelberg, Frankfurt, Friedberg,  
Düsseldorf, Arentsburg, Rheinzabern, Stock-  
stadt, Saalburg, Pfünz ; — (with LVTAEVVS on  
rim) Cannstatt. SATTO FE : Rottweil (below  
ornament of SATVRN FECIT bowl), Arnsburg,  
Neckarburken, Wilferdingen, Andernach, As-  
berg. SATTO FEC : Pfünz. SATTO F : Saal-  
burg, Faimingen, Rheinzabern, Heddernheim.  
SATTO : mould Remagen ; — 37 Heddernheim.
- SATVRIO (Rheinzabern, Hadrian—Antonine) SATVRIO : Speyer.
- (i) SATVRNINVS (Lezoux, Antonine) SATVRNINI : Lezoux.
- (ii) SATVRNINVS (Moselle district, Trajan—Hadrian) SATVRN FECIT :  
Rottweil (with SATTO FE below ornament),  
Arentsburg, Arnsburg, Wirbelkirchen, Meeren-  
donk, Mainz, Andernach, Trèves, Metes, Heiden-  
heim, Riegel, Friedberg, Saalburg, Longeville.  
SATVRN F : *figure-stamp* Speyer.
- SECVNDIANVS (Lezoux, ?) SECVNDIANI : mould Lezoux.
- (ii) SECVNDINVS (Lezoux, Trajan—Hadrian) SECVNDINI : mould  
Lezoux. SECVNDINVS : mould Lezoux.
- (iii) SECVNDINVS (Rheinzabern and Westerndorf, Hadrian—Antonine)  
SECVNDINVS F : Westerndorf.
- SECVNDINVS (Rheinzabern, Antonine) SECVNDIN AVI : mould  
AVITI (with COMITIALIS F and graffit of PERVINCVS)  
Speyer ; — 37 Alsace (with MAIANVS) ; —  
Rheinzabern, Zugmantel.
- (i) SECVNDVS (La Graufesenque, Claudius—Domitian) OF SECVND :  
Neuss. SECVNDI : Puigouzon.
- (ii) SECVNDVS (Lezoux, Trajan—Hadrian) SECVNDI M : mould  
Lezoux. SECVNDI : Moulins. SECVNDVS F :  
mould Lezoux.
- (i) SEDATVS (Lezoux, ?) SEDATVS : mould Lezoux. SEDATI :  
mould Lezoux.
- (ii) SEDATVS (Westerndorf, second half of second century) CSS  
SEDATVS F : Westerndorf.
- SERVVS (Lezoux, Trajan—Antonine) SERVI M : mould  
Lezoux ; — 37 Lezoux, London (Guildhall).

- SERV M : mould Moulins ; — 37 Lezoux, Vichy, Rouen, *Castor*. SERVI : Lezoux, *Corbridge* (SERV[. . .]).
- (ii) SĒVERIANVS (Rheinzabern, Hadrian—Antonine) SEVERIANVS GEMELLVS FECERVNT AMBO : mould Rheinzabern. SEVERIANVS FECIT FORMAS : mould Rheinzabern. SEVERIANVS : moulds Rheinzabern, Speyer, Mainz ; — 37 Mainz.
- (i) SEVERVS (La Graufesenque, Nero—Domitian) SEVERI : Compiègne, *Colchester*.
- (iii) SEXTVS (Rheinzabern, Antonine) SEXTVS F : mould of COBNERTVS Speyer. SEXTIS F : mould Rheinzabern.
- SILVIVS (La Graufesenque, Domitian—Trajan) SILVI O : Cusset.
- SISSVS (Lezoux, ?) SISSVS : mould Lezoux.
- SOLINVS (Lezoux, second century) SOLINI OFI : mould Lezoux. SOLINI : mould Lezoux. SOL : *figure-stamp* Lezoux.
- STABILIS (Rheinzabern, Antonine) STABILIS : mould of CERIALIS Speyer.
- STATVTVS (Rheinzabern, second half of second century) STATVTVS F : Rheinzabern.
- TETTVRVS (?) TETTVRV : *Corbridge*.
- TOCCIVS (Lavoye, Hadrian) TOCCIVS : Saalburg.
- TORDILO (Trèves, end of second and beginning of third century) TORDILO : Zugmantel, Saalburg, Bonn, Arentsburg, Wiesbaden, *London* (Guildhall).
- TRIBVNVS (Lavoye, Hadrian—Antonine) TRIBVNVS : mould Lavoye ; — 37 Lavoye.
- TVRRINO (Lezoux, ?) TVRRINO M : Lary. TVRRINO : Dijon.
- VALENS (Lezoux, ?) VALENS AVOTI : Cusset. VALENS : mould Lezoux ; — 37 Vichy.
- (ii) VEGETVS (Lezoux, Antonine) VEGETVS : mould Lezoux.
- VENERVVS (Westerndorf, second half of second century) VENERI : Westerndorf.

- (i, ii) VERECVNDVS (Lezoux, Heiligenberg, Ittenweiler and Rheinzabern, Vespasian—Antonine) VERECVNDI: mould Lezoux; — 37 Zugmantel. VERECVDI: Mainz. VERECVNDVS: Mainz, Ittenweiler, Heiligenberg, Rottenburg, Luxeuil, Riegel, Augsburg, Vindonissa, Kostlach. VERECVNDV: Ittenweiler, Riegel, Faimingen. VERECVNDVS F: moulds Rheinzabern, Speyer, Ghent, Brussels, Tongres; — 37 Faimingen, Kapersburg, Rheinzabern, Atzelberg. VERECVNDV F: Stockstadt.
- (ii) VERVS (Rheinzabern, Antonine) VERVS F: *Colchester* (? 37)
- (i) VICTOR (Lezoux, Hadrian) VICTOR: Orange.
- (ii) VICTOR (Rheinzabern, Antonine) VICTOR FECIT: Rheinzabern. VICTOR FEC: Friedberg. VICTOR FE: Dalheim.
- (i, ii) VICTORINVS (Lezoux and Rheinzabern, Hadrian—Antonine) VICTORINVS: moulds Rheinzabern, Speyer, Stuttgart, Paris; — 37 Cannstatt, Kapersburg, Zugmantel, Orleans. VICTORINVS F: moulds Rheinzabern and Schiltigheim; — 37 Rheinzabern, Niederbieber, Heddernheim, Zugmantel. VICTORINVS E: mould Rheinzabern.
- VINDOS (Lezoux, ?) VINDOS: mould Toulon-sur-Allier. VIND: mould Vichy.
- (ii) VIRILIS (Rheinzabern, Hadrian—Antonine) VIRILIS F: Rheinzabern. VIRILI (mould of COMITALIS F): Rheinzabern. VIRILIS: Rheinzabern.
- (ii) VITALIS (Rheinzabern, Hadrian—Antonine) VIT (mould of 'CERIALIS): Rheinzabern. VITL F: Speyer.
- VOLOGESVS (Westerndorf, second half of second century) CSS VOLOGESVS F: Westerndorf.

## KNORR FORM 78.

SMALL, DECORATED, NEARLY CYLINDRICAL BOWL WITH SLIGHTLY SLANTING WALL, AND WITHOUT LIP OR FOOTSTAND

This bowl was obviously developed under the influence of the earlier examples of Form 30. It differs, however, from its prototype in the absence either of a lip or of a definite footstand, and in the more pronounced outward slope of its wall, which is indeed already noticeable in some examples of



Form 30. Furthermore, the continuity of the interior wall with the solid base is only interrupted by an obtuse angle. The base itself is sometimes furnished with a rudimentary ring or groove.

The rim is slightly everted in many examples and is quite plain, whilst its junction with the body of the vessel is usually marked by two or more girth-grooves, beneath which the decoration occurs. Occasionally an ovolo forms an upper border to the design (Pl. XXI. 2), as in Form 30, but this is generally absent.

The types of decoration are similar to those employed on Form 30 of the corresponding period, and comprise festoons, garlands (Pl. XXI. 2), wreaths, free-style in the manner of GERMANVS (Pl. XXI. 3), panel- and figure-ornament.

The inside of the vessel is not uncommonly studded with grit-particles, and does not present the circular groove which is so invariably characteristic of early examples of Form 30.

This bowl is found in the Vespasian period at Hofheim, at Rottweil, and other sites, the occupation of which may be dated to the Flavian period or extended beyond it, such as Holt, Caersws, and Bregenz (the "cellar-find" 80-110 A.D.). At all these sites the decoration is that of the reigns of Vespasian and Domitian.

This small bowl had a short life and was especially characteristic of the Flavian period. There is no evidence at present of its survival beyond the reign of Trajan.

Potters' stamps are rare and are associated with South Gaul and early East Gaul: CORNVTI OF, CRVCVRO, GERMANI F, RANTO.

### *DÉCHELETTE FORM 67.*

#### THE GLOBULAR DECORATED BEAKER.

This *olla*-like form presents obvious affinities to the Arretine type, Dragendorff 10 (Pl. XXVIII. 2), but it was probably developed under the influence of the "plain" *olla* of the Claudian period, e.g. Ritterling Type 25 (Pl. XXVIII. 6).

It has a short, obliquely everted rim and a globular wall, and varies considerably in contour in different examples (Pl. XXI. Figs. 8-13).

Below the rim a considerable part of the wall is left plain, varying from one-third to one-half. Beneath the plain zone and near the position of the vessel's greatest diameter it is encircled by two or more girth-grooves, which generally form an upper border to the lower or decorated zone. Rarely these grooves are rudimentary, and the decorated zone is surmounted by an ovolo border (Pl. XXI. Fig. 13). The footstand is usually rudimentary and solid, but it may be defined by a circular foot-ring (Pl. XXI. Figs. 9 and 11).

The decoration in the majority of instances is in low relief, and is usually arranged in panels (Pl. XXI. Figs. 9, 11, 12, 13), with or without a vertical conventional plant-ornament (Pl. XXI. Fig. 9). We may also find a series of curved lines in relief, arranged horizontally, and interposed between groups of upright ornaments, as at Rottweil (Pl. XXI. Fig. 13) and Corbridge.

Free-style decoration is also represented, as at York (May, Pl. II. Fig. 1), but the human figure is only exceptionally found, *e.g.* at Newstead (Pl. XXI. Fig. 12).

In the earlier examples, however, the design usually consists of a winding-scroll, the lower concavities of which may be filled up with "arrow-heads." This type of ornament occurs in the Flavian period at Aislingen, Corbridge, Margidunum, and in the second occupation of Hofheim (Pl. XXI. Figs. 8, 10), and clearly indicates that these beakers were made in South Gaul as well as at Lezoux.

The stamps found on this form are those of both South and Central Gaulish potters, such as BVTRIO, CRVCVRO, and TALVSSA, who may be assigned to the Domitian-Trajan period.

Form 67, like Form 78, is chiefly characteristic of the Flavian period, and is found in the second occupation of Hofheim, at Rottweil, in the first occupation of Newstead, at Corbridge and other sites. It occurs also at Gellygaer, where it probably belongs to the earliest period of occupation. Its greatest incidence appears to have taken place in the last quarter of the first century, and it is probable that it did not long survive the reign of Trajan. It is absent from Antonine sites, such as the second occupation of Newstead, and does not occur at Niederbieber (190-260 A.D.).

### DÉCHELETTE FORM 64.

#### CONICAL DECORATED BEAKER.

This vessel has close affinities to the metal beaker of *repoussé* silver found at Berthouville, near Bernay (Pl. XXII. Fig. 3). The well-defined and everted lip is followed by a plain zone or band, which is separated from the decoration by two or more circular grooves and sometimes by mouldings.

This form is associated with the names of the Lezoux potters BVTRIO and LIBERTVS. Figure-subjects predominate, usually arranged in free-style, but occasionally in metope-like compartments separated by a conventional upright ornament (Pl. XXI. Fig. 4).

The beaker from Oundle (Pl. XXI. Fig. 5; see also Fig. 6) well illustrates the free-figure style of the potter LIBERTVS.

A well-defined expanding footstand is a feature of this form.

Its chief incidence may be assigned to the reigns of Trajan and Hadrian.

It has not been recorded, under circumstances which would suggest its manufacture, in the Flavian period.

*DÉCHELETTE FORMS 65, 66 and 68.*

The decorated vessels comprised under the forms Déchelette 65, 66 and 68 are all of Lezoux manufacture, and may be attributed to the early part of the second century. Figure-subjects, medallions and metope-ornament predominate. It may be doubted whether their life, with the possible exception of Form 68, was prolonged into the Antonine period.

Stamps of the following potters have been recorded :

Pl. XXI. Fig. 7, Form 65 : LIBERTVS.

Pl. XXI. Fig. 14, Form 66 : LIBERTVS.

Pl. XXI. Fig. 15, Form 68 : BVTRIO, PVTRIV, PATERNVS.

*DÉCHELETTE FORM 71.*

SHALLOW, CIRCULAR BOWL WITH FLAT, DECORATED MARGIN (Pl. XX. 6, 6A).

This form was a close imitation of embossed silver vessels (Pl. XXVII. 4, 5) both in shape and in the details of decoration of its rim. This decoration consists of animals either at rest or peacefully pasturing, or else engaged in combat with animals of prey (lions, griffins, etc.) or fleeing from them. These scenes are divided into sections by Bacchic masks and attributes (thyrsi, Pan's pipes, etc.). This type of decoration occurs on a silver patera from Vienna (Pl. XXVII. 4), and on another patera from Belgrade.<sup>1</sup> A bead-row on the inner side of the frieze is present both in the silver patera and its copy in *Terra Sigillata*, of which two examples (moulds from Lezoux) are stamped OFFI LIBERTI.

A similar style of decoration occurs on the flange of a silver bowl (resembling Drag. 38 in form) found in Champagne (Pl. XXVII. 5). The masks or faces on this rim, which separates the scenes of animals in combat or in flight, are very similar to heads on tetradrachms of Asia Minor about the time of Mithridates VI. in the first century B.C.<sup>2</sup> A wide rim in *Terra Sigillata* in the style of LIBERTVS and bordered by his characteristic ovolo probably belonged to a flanged vessel of similar form.<sup>3</sup>

Déchelette<sup>4</sup> considers that this type of toreutic decoration falls into two periods : the earlier are of Augustan age and comprise the friezes in which the animals are peacefully pasturing or resting, whilst the later series (referred to about 100 A.D.) depict animals in combat or in flight from lions or griffins, etc. In both cases Bacchic masks divide the scenes. The later series is the category copied by LIBERTVS. Déchelette's distinction appears to be rather arbitrary, for animals in combat are represented on silver vessels from South Russia of Hellenistic character and Augustan age (Pl. XXVII.

<sup>1</sup> Déch. I. Fig. 139.

<sup>3</sup> Curle, *Terra Sigillata*, p. 159.

<sup>2</sup> Longpérier, *Gaz. archéol.* 1880, Pl. I.

<sup>4</sup> I. p. 233.



13), and on a silver scyphos of the same period from Opztropataka in Hungary (Pl. XXII. 2).

An Alexandrian origin has been attributed to this silver ware, but Déchelette (i. p. 230 *sqq.*) has advanced cogent reasons for concluding that Asia Minor rather than Alexandria was the chief centre of activity of metal workers under the early Roman Empire.

## CHAPTER VI

### THE ORIGIN AND DEVELOPMENT OF THE DECORATIVE DESIGNS OF PROVINCIAL TERRA SIGILLATA

THE art of the potter was already old when the worker of South Gaul, under classical influence and domination, first began to mould and decorate the red clay of his native province, and the heritage of bygone ages is reflected in his products in a very marked degree.

The ultimate sources whence he drew his inspiration are treated in the chapter on Evolution (Chapter X.). Here we shall merely confine ourselves more particularly to a consideration of the more immediate prototypes which he copied and imitated, and of the characteristics of his decorative designs as they appear in successive periods.

The province in which the industry arose had long been in contact with the civilizations of Greece, the Hellenistic East and Rome, and this historical setting would appear to account in an adequate manner for the practically complete absence of any element which may truly be termed Celtic in the decorative art of the early Gaulish Sigillata potters. Thus, whilst his work certainly bears evidence of indigenous development, it is singularly devoid of native, indigenous inspiration. On the other hand, a careful study of his art reveals the fact that most of his designs, whether ornamental or decorative, may be traced back to classical sources, either Roman or Graeco-Roman. It is therefore to the works of the artists of the classical world that we must look in order to discover the sources which inspired the provincial Sigillata potter; and these sources will be found not only in ceramics, but also in the art of the sculptor and the metal worker.

In dealing with an art which persisted for more than two centuries, it is difficult, and indeed almost impossible, to formulate comprehensive generalizations; for each successive period, whether of one, two or three decades, must be treated on its own merits and with due regard to antecedent as well as to contemporary influences. Yet the contrast between typically first- and typically second-century design on Sigillata is so striking that it warrants special consideration.

The predominant note of the decorative art of the early South Gaulish potters is revealed by their representation of subjects of contemporary life,

more particularly of plant life. On the other hand, the art of the *Lezoux* potters of the second century is largely characterised by a predilection for mythological themes.

It is true that there are many exceptions to this generalisation, yet they are neither so numerous nor so weighty as to invalidate its general accuracy. In any endeavour to explain this contrast a number of considerations must be borne in mind. In particular, it may be pointed out that the South Gaulish potters commenced their work at a time when the great wave of naturalism, which had swept over the Roman Empire in the Augustan age, had not yet spent its force.

The immediate prototypes used by these potters are (as will be shown later on) to be sought to a great extent in the naturalistic reliefs of the early Empire. As already indicated in the section on Arretine ware, good examples of these reliefs are illustrated in our plates, e.g.

(a) *Italian Sigillata*: Pl. II. 3, 4 *ATERYS*; Pl. XXIV. 1 *P. CORNELIVS ANTIQVVS*, 2 *PANTAGATVS*, 3 *M. PERENNIVS TIGRANVS*,<sup>1</sup> Pl. XXV. 7.

(b) *Metal work*: Pl. XXII. 5, 7-9, 11; Pl. XXVII. 2.

(c) *Stone work*: Pl. XXV. 8, 9, 11 *Ara Pacis Augustae*.

In these Augustan examples the scheme of decoration is comprised either by plant-life alone, or else by plant-life in conjunction with contemporary birds or animals, whilst mythological subjects, such as cupids, occupy quite a subsidiary position.

We shall find most of these characteristics, especially that of "detail ornament," faithfully imitated in the work of the early Gaulish potter; but in Gaul the naturalism of the Augustan artists soon became conventionalised in the process of imitation. Early in the Flavian era we notice an increasing incidence of mythological subjects, which had only appeared sparingly in the work of the early or Julio-Claudian potters. The ultimate development of this tendency is evinced by many examples of the work of typically second-century (*Lezoux*) potters, in which mythological types frequently occupy a large part of the decorative scheme.

It is therefore clear that during the early stages of the industry the potters of South Gaul worked to a great extent under the influence of Augustan naturalism, and that at this time also the Hellenistic religious cults had not penetrated deeply into the mentality of the western provinces of Rome. As a necessary consequence, the demand for mythological representations had not seriously arisen.

In this connection it should be noted that the earliest *Sigillata* of South Gaul found its way into the provinces, e.g. Spain, Gaul and Britain rather

<sup>1</sup> Whilst naturalism was perhaps most characteristic of the later Augustan potters, such as *CORNELIVS*, the beautiful vase-urn by

*TIGRANVS*, one of the earlier stages of *M. PERENNIVS*, indicates its early practice.



than into Italy. It was chiefly in the Flavian period that Terra Sigillata was imported to Italian towns, such as Pompeii, where it found a ready market down to the catastrophe of 79 A.D. But at the period of the "turn" of the first and second centuries, and at the commencement of the chief period of exportation from Lezoux, the Romanisation of the provinces had advanced to a stage when the popular need for mythological representation was felt, and when the potter was able to supply the consequent demand.

Some features in the development and trend of the decoration and design of Terra Sigillata will now be passed under review.

#### *A. South Gaulish Decoration.*

On closely studying the decorative *motifs* of the early South Gaulish potters (including a few of the older Lezoux workers, such as ATEPOMARVS), it becomes clear that much of their detail-ornament was inspired by the reliefs of Italian Sigillata as well as of the metal and stone work of the Augustan period.

Amongst the *motifs* or ornamental schemes which were directly imitated or copied from these sources the following may be enumerated :

- (1) The frequent use of bead-rows.
- (2) The ovolo border of the crater, Form 11, and of early examples of Form 30.
- (3) The "nautilus" (fern-frond or fish-bladder) ornament of the lower frieze of early examples of Form 29. (Cf. the Italian examples Pl. II. 2; Pl. XXIV. 8, 9 with the Gaulish example, Pl. III. 7.)
- (4) The godroon or "elongated tongue" pattern of the lower frieze of Form 29. (Cf. the Bosco Reale and Hildesheim metal vessels on Pl. XXII. 4, 5, with the Gaulish bowls on Pl. III. 4, 6.)
- (5) The "upright leaf" ornament, connected below by arcs, occasionally found on the lower frieze of Form 29 and on early examples of Form 30. (Cf. the Puteolan example, Pl. XXIV. 10, and the Arretine specimen in Pl. VIII. of the Loeb collection, with the Gaulish bowls Pl. III. 5 by SENICIO, and Pl. IX. 1.)
- (6) The rouletting of the rim in Form 29 and also that of the central moulding in early examples of this vessel. (Cf. Pl. II. 1, 2, 4, with the Gaulish vessels, Pl. III. 5 by SENICIO, 6 by SCORRVS, 7 and Pl. XXV. 1, 2, 3.)

The following *motifs*, which were typical of the naturalistic reliefs of Augustan ceramic, toreutic and plastic art, became conventionalised in Gaul at an early date. Some of the oldest Gaulish examples are, however, highly naturalistic :

1. The continuous, winding scroll. This *motif* occupied a large field in South Gaulish decoration, and at first it generally occurs unaccompanied by animals or birds, but these are found occasionally in quite early bowls, thus carrying on an Augustan practice, for scrolls with or without small examples of animal life are to be found on specimens of Augustan art:

- (a) The simple scroll (cf. the Augustan examples: Pl. XXIII. 5, Pl. XXIV. 3 M. PERENNIVS/TIGRANVS, Pl. XXIV. 4 M. PERENNIVS/SATVRNINVS, Pl. XXIV. 9 NAEVIVS, and Pl. XXII. 5 from Hildesheim with the Gaulish vessels, Pl. III. 4 BILICATVS, 7, 8 CATLVVS, Pl. XXV. 1, 3). In some of these early Gaulish scrolls, e.g. Pl. XXV. 1, 3, the naturalism is very pronounced.

- (b) Scroll associated with forms of life.

The acanthus-scrolls of the *Ara Pacis Augustæ* frequently support birds (Pl. XXV. 9), and this type is also met with on the Hellenistic silver vase from Nikopol, South Russia (Pl. XXVII. 2), as well as on Italian Sigillata (Pl. XXV. 7). A Gaulish imitation in the style of ATEPOMARVS is represented on Pl. XXV. 6. This practice of associating birds with the scroll was continued into the Claudian period, especially by the makers of Form 30 (see Ritterling, *Hofheim*, Pl. XXVI. 1, 2, and our Pl. VIII. 2 MASCLVS, and 3).

The beautiful acanthus-scroll of ATEIVS<sup>1</sup> (Pl. II. 4), with its realistic representation of bird- and insect-life, is worthy of especial notice, because this type probably inspired similar attempts on the part of the early South Gaulish potters; for elements of this scroll, with or without forms of life, are of occasional occurrence. Thus, in the early or Tiberian bowl, Form 29, found at Silchester, bearing the stamp of the Puteolan potter VITLVVS, there is a conventionalised acanthus-scroll associated with plant- or bird-life (Pl. XXVI. 3), and much the same scheme is shown in another Tiberian example from the same site (Pl. XXVIII. 3). In the Tiberio-Claudian bowl by ACVTVS (Pl. XXVI. 6) a similar type of scroll has its concavities occupied by a "sitting" hare.

The naturalism of the simple winding acanthus-scroll (Pl. XXV. 1) in the Tiberian bowl figured by Déchelette (ii. 21) is perhaps only surpassed by the vine-scroll of TIGRANVS already referred to.

In illustration of the persistence of the influence of the Augustan acanthus-scroll down to probably the Claudio-Neronian period, attention is directed to a comparison of Pl. XXV. 11 from the *Ara Pacis Augustæ* and Pl. XXV. 10 from Margidunum.

<sup>1</sup> The practice of this potter of placing his stamp in the interior of his crater (as well as on the outside) was subsequently adopted by South Gaulish potters.

2. The broad, straight wreath (cf. the Italian fragment, Pl. XXIV. 5, and the Hildesheim bowl, Pl. XXII. 6, with the Gaulish vessels, Pl. III. 5, 6 by SENICIO and SCOTTIVS).

3. The spiked leaf or bud (cf. Pl. II. 1 by ATEIVS/EVHODVS, Pl. XXIV. 1 by P. CORNELIVS/ANTIOCVS, and Pl. XXIV. 2 by PANTAGATVS with the Gaulish examples Pl. IX. 4 MASCLVS, Pl. III. 1, and Pl. VIII. 2, 3).

4. The leaf with many prongs (cf. Pl. XXIV. 1, 2, with the Gaulish examples on Pl. IV. 6, Pl. XV. 4).

5. The pomegranate or "poppy head" (cf. Pl. XXIV. 1 CORNELIVS with the MELVS bowl from Strasbourg, Pl. XXV. 4 and Pl. VI. 1, 6, 7, Pl. IX. 1, 2).

6. The acorn (cf. Pl. XXIV. 1 by CORNELIVS with the Gaulish examples, Pl. XXV. 3 and 5 MOD[ESTVS]).

7. The imbricate pinnate leaf, so characteristic of Claudian work, may have been derived directly from a small pinnate feather, *e.g.* as depicted in the wings of Victory on a silver vessel from Bosco Reale (*Monum. Piot*, iv: Pl. III.), or from the imbricated ornamentation of the one-handled cup of the same provenance (Pl. XXVII. 7), but there is an earlier prototype in a Megarian bowl from Athens (Pl. XXIII. 4). These examples should be compared with the Gaulish types (Pls. IV. 4; V. 3, 10).

8. Festoons or garlands of leaves and fruits were a favourite class of decoration in Italian Sigillata, and good examples are illustrated on Pls. XXIV. 1 CORNELIVS; II. 5, 8 M. PERENNIVS; XXVI. 2.

They reappear on the early Gaulish crater, Drag. 11 (Pl. XXI. 1 and Pl. XIX. 1 by VOLVS), on the carinated bowl (Pl. XXVI. 3 VITLVS), and on later work, as on East Gaulish bowls by DEXTER in the second century (Pl. XVIII. 3).

Notwithstanding a strong predilection for purely ornamental types, the Tiberio-Claudian potter occasionally illustrated figure-subjects, either mythological or of contemporary origin, such as mermaids (Pl. XXV. 1), masks as in the DARIBITVS bowl (Pl. XXV. 2), Apollo (Pl. X. 2), Jupiter (?) in an arcade (Pl. X. 5, Colchester), and Mercury (Curle, *Terra Sigillata*, p. 147, Fig. 15), cupids (LICINVS, Knorr, *Terra Sigillata*, 1919, Pl. 46 c).

In the Claudio-Neronian period the depiction of contemporary animal life is not uncommon.<sup>1</sup> The animals are usually small and represent birds (Pl. III. 9 by AQVITANVS), hares, bears, lions (Pl. VIII. 2 by MASCLVS), boars (Pl. IV. 1 by BASSVS et COELVS), etc. Many of these types appear to be imitations of similar figures which occur in Augustan toreutic art

<sup>1</sup> One of the earliest exponents of contemporary animal life was the potter LICINVS; see a Tiberio-Claudian bowl from Mainz (Knorr, *Terra Sigillata*, 1919, Pl. 46 c).



(Pl. XXII. 7, 8). The sitting hare even appears on a Greek kylix (Pl. XXXVI. 35), and may be compared with an identical figure in Egyptian hieroglyphs (Pl. XXXVI. 34).

Occasionally animals with mythological associations are depicted at this period, *e.g.* the Dionysiac panther of MASCLVS (Pl. VIII. 2) and BASSVS et COELVS (Pl. IV. 1). Its prototypes are found in relief-ceramics, *e.g.* on a Megarian bowl (Pl. XXIII. 4) and on metal work (Pl. XXII. 10).

Figure-subjects, both mythological and human, are perhaps more frequent on early examples of Form 30 than on contemporary specimens of Form 29 (Pl. X. 2 from London, Pl. X. 5 Colchester, Pl. VII. 5, and Pl. IX. 2 Hofheim I.) ; for the large vertical surface of the cylindrical bowl lent itself more readily to the illustration of figures and groups.

Many of the above-mentioned ornamental types and figure-subjects were continued into the Flavian period, especially the continuous scroll and illustrations of contemporary animal life, as shown by examples from Pompeii, Rottweil, the second occupation of Hofheim, and the first occupation of Newstead (Pls. IV. 6, 10 ; V. 1, 5, 7, 9 ; VI. 9, 12).

In the Flavian period there is a marked increase in the incidence of animal types as well as of the human figure, both contemporary and mythological. As already indicated, even mythological subjects were depicted, though somewhat tentatively, on early examples of Forms 29 and 30, and their occurrence is still somewhat uncommon and restricted in type on Flavian carinated bowls ;<sup>1</sup> but on Flavian examples of Forms 30 and 37 they are met with more frequently.

Thus the majority of the mythological types attributable to South Gaul appear to be confined for the most part to one or other of the two forms, 30 and 37, *e.g.* Diana and Hind (Déch. 63, 63 A), Jupiter (Déch. 2, 6), Hercules (Déch. 466), Mercury (Déch. 292, 299), Minerva (Déch. 81, 82, 83, 84, 85), Venus (Déch. 189, 203), Bacchus (Déch. 302, 303), Silenus (Déch. 307, 307 A, etc.), Victory (Déch. 474, 479, 481), etc.

In spite of the introduction of mythological subjects and scenes of a *genre* character (Pl. XX. 2 by GERMANVS ; Pl. VIII. 4 fighting gladiators), the decoration in the Flavian period of Forms 30 and 37 still displays the extensive use of ornamental *motifs*, such as winding-scrolls, etc., so characteristic of the earlier period.<sup>2</sup>

<sup>1</sup> The following mythological types on Form 29 are enumerated :

*Diana and Biga.* Walters, C.R.P. M. 365.  
*Eros* (Déch. 274) Walters, *op. cit.*  
 M. 358 ; Atkinson, *Pompeii*,  
 Fig. 5 MOMMO.  
 (Déch. 280) Curle, *Newstead*,  
 205, 8 ; Atkinson, *op. cit.*  
 Fig. 8 MOMMO. See also  
 VITLVS bowl, Pl. XXVI. 3.  
*Gryphon* (Déch. 502) Walters, *op. cit.*  
 M. 284, 287, 333, 361.  
 (Déch. 503 A) Atkinson, *op. cit.*

Figs. 17 MOMMO and 32  
 MANDVILLVS.

(Déch. 504) La Graufesenque.

(Déch. 802) Walters, *op. cit.*  
 M. 350.

(Déch. 21) Pl. XXV. 1.

*Romulus and Remus* (Déch. 494) La Graufesenque.

*Satyr playing of CALVI Sels ; Margidunum ;  
 double flute* Pl. XXXIII. 14.

*Masks* Pl. XXV. 2 DARIBITVS.

<sup>2</sup> In some cases their use was exclusive, *e.g.*  
 Atkinson, *op. cit.* Figs. 37-39, 46, 47, 68-71.

At this time, too, the potter occasionally adopted *motifs* which appear to have been derived from contemporary or antecedent bas-reliefs. Thus the clusters of pine leaves on Bacchanalian bas-reliefs became conventionalised into the fan-shaped leaf on Gaulish bowls of Vespasian-Domitian potters (Pl. V. 7, etc.).<sup>1</sup>

But about the junction of the first and second centuries, viz. the late Domitian-Trajan period, a marked change sets in, and figure-subjects began to occupy the predominant place in the scheme of decoration. The later products of Banassac (Pl. XIX. 3, 4) and the later vessels of the Bregenz "cellar-find" (Pl. XVI.) well illustrate this stage of development.

In tracing out the successive stages of development of relief-Sigillata in the first century, some consideration must be given to the so-called *Free Style*, in which animals and other subjects are depicted free in the field, and an attempt is made to illustrate pastoral, hunting and other scenes. Perhaps no decorative scheme in provincial Sigillata has more obviously been derived from classical and other early sources. Its importance therefore consists not only in its chronological significance, but also in the evidence it affords of continuity in art.

Although this mode of decoration on provincial Sigillata was reserved in the main for depicting "nature" scenes of contemporary life, it owed its inception to classical friezes and bas-reliefs. It was handed down to the Gaulish potter by the intermediary of Italian Sigillata and of the toreutic, terra-cotta and marble work of the early Empire.

Free-style decoration occurs in two broad schemes; in the first century it chiefly occurs in friezes after the manner of many early prototypes, whilst in the second century it usually occupies the whole ornamented surface of the bowl. In bowls belonging to the transition from the first to the second century either one or the other of these schemes may be met with (cf. Pl. VIII. 5 BVTRIO and Pl. XXVI. 14 LIBERTVS).

Amongst our illustrations the following figures are examples of the immediate prototypes of this Gaulish style:<sup>2</sup>

- (a) "Megarian" ware, Pl. II. 6.
- (b) Pergamene ware, Pl. XXIII. 1.
- (c) Italian Sigillata, Pl. XXIV. 6, and see also Walters, *C.R.P.* L 101, Alexander slaying the lion.
- (d) Toreutic art, Pl. XXII. 10, Pl. XXVII. 2 the Nikopol vase with men lassoing horses; a Gaulish example of toreutic free-style is illustrated by the frieze of the Este bucket (Pl. XXVII. 1) assigned to the La Tène period.

<sup>1</sup> A fan-tailed plant of palmette type is found as a bordering-motif in the Augustan period at Haltern (Curle, *Terra Sigillata*, p. 135, Fig. 4.)

<sup>2</sup> Early Greek free-style appears to have been the ultimate prototype. See A. S. Murray, *Handbook of Greek Archaeology*, Fig. 48.



(e) Sculpture. See the free-style of the marble vase by SOSIBIOS, Collignon, *Sculpt. Grecque*, ii. Fig. 339, and a similar Bacchanalian vase in the British Museum.

(f) "Aco" beakers, Pl. XXIII. 11.

In South Gaul the elements of "free-style" first appear on Sigillata of the Nero-Vespasian period (Pl. XXVI. 8, Form 30 style of BASSVS et COELVS; Pl. XXVI. 7, Form 29 GENIALIS).

But the chief honour of introducing this style in its fully developed form must be ascribed to the Nero-Flavian potter GERMANVS. His work bears the distinct impress of individuality and of a search for earlier and classical models. Thus many elements in his decoration (*e.g.* Pl. X. 4, Form 30; Pl. XI. 7, Form 37, and Pl. XX. 2) were inspired by classical work, and not by the designs of his immediate provincial predecessors. His rendering of rocks is particularly characteristic of the lapidary's art, whilst the hanging fish in the fishing scene had already appeared in metal work (Pl. XXVII. 12) and in Arretine ware (Pl. XXIV. 6), and were handed down to the later potter L. COSIVS (Pl. XIX. 6). Stags or hinds and panthers, similar to those of GERMANVS, are also found in Augustan toreutic art (Pl. XXII. 2, 10).

The free-style frieze of the Silchester bowl, Form 29 (Pl. XIX. 2), shows some affinity to the frieze of the silver amphora from Nikopol (Pl. XXVII. 2), which is probably of Augustan age.

Free-style is also not infrequent on the Flavian variant of Form 30, *viz.* Form 78 (Pl. XXI. 3).

The free-style, so ably developed by GERMANVS, was carried on by BIRACILLVS (Pl. XIX. 5) and by SATTO (Pl. XVII. 4), whose work displays a close similarity to that of the earlier potter. At Lezoux it was adopted and extended by LIBERTVS, whose earliest activity (in plain Sigillata) dates from the Flavian period. The decoration of Forms 64, 65 and 66 (Pl. XXI. 4-7, 14) is typical of the free-style friezes of human figures by LIBERTVS or by a potter in his style. The signed bowl, Form 37, by this potter (Pl. XXVI. 14) exhibits the older scheme of the so-called "transitional" type of decoration, whilst Pl. XX. 5 illustrates an early Lezoux example in the style of LIBERTVS.

The influence of the metal worker is strongly marked in the products of this potter, for some of his vessels are obvious copies of pre-existing silver vases (*cf.* Pl. XXI. 5, Form 64, with Pls. XXII. 3 and XXVII. 3, and Pl. XX. 6, Form 71, with Pl. XXVII. 4), whilst many of his figure-types can be traced back to prototypes in metal, *e.g.* the slave with the lamp (Déch. 566). (*Cf.* also the types on Pl. XX. 6 with those on Pl. XXVII. 4.)

The free-style of LIBERTVS closely resembles that of the contemporary potter BVTRIO, and their hunting scenes appear to be a free rendering of Arretine prototypes (*cf.* Pl. XX. 5, Pl. VIII. 5 BVTRIO, Pl. XII. 2 BVTRIO with the Arretine example, Pl. XXIV. 6).



The chief period of the decorative activity of *LIBERTVS* and *BVTRIO* must be assigned to the reign of Trajan. Towards the middle of the second century this style degenerated into a haphazard medley of figure-subjects, and the rocks, which formed so prominent a feature in the earlier examples, have at this date become conventionalised into oval (Pl. XII. 1 *PATERNVS*) or lozenge-shaped objects (*Déchelette*, i. Fig. 134).

A still further decay in technique becomes evident in the work of the East Gaulish and Trans-Rhenish potters of the end of the second century and the beginning of the third century, *e.g.* at Rheinzabern, Trèves and Westerndorf (Pl. XVIII. 4 *TORDILO*, Pl. XVIII. 6 school of *ALPINVS*; Pl. VIII. 8 Westerndorf).

Although the South Gaulish potter owed much of his detail-ornament to Italian *Sigillata* (as we have already indicated), it is a remarkable circumstance that only a few of his figure-types, whether mythological or contemporary in character, can be traced back directly to Arretium. For the greater part they were either copied or imitated (with modifications) from the Hellenistic or Neo-Attic sources of the Augustan era, or even an earlier period.

A study of our Pls. XXXIII.-XXXVI. will demonstrate the earlier and contemporary sources from which the South Gaulish potters derived their inspiration for many of their types. (See Appendix.)

GRÆCO-ROMAN CERAMICS, MARBLE, TERRA-COTTA AND TOREUTIC.		PROVINCIAL SIGILLATA.
<i>Satyr playing the double flute</i>	Pl. XXXIII. 1-6 - -	Pl. XXXIII. 10, 11, and variants 7-9, 14, 15
<i>Dionysiac panther</i> - - -	Pl. XXXIII. 16-19 -	Pl. XXXIII. 20-22
<i>Hermaphrodite or Faun with torch</i>	Pl. XXXIII. 23, 24, 35 -	Pl. XXXIII. 25, 26
<i>Pan with amphora or thyrsus</i>	Pl. XXXIII. 38 - -	Pl. XXXIII. 39
<i>Mænad with thyrsus</i> - -	Pl. XXXIV. 1; cp. also Pl. XXXIII. 31-33	Pl. XXXIV. 2
<i>Diana and the hind</i> - -	Pl. XXXIV. 4, 5; cp. also Pl. XXXIV. 3 ( <i>Apollo</i> )	Pl. XXXIV. 6, 7 ( <i>Lezoux</i> type)
<i>Victory pouring a libation</i> -	Pl. XXXIV. 8 - -	Pl. XXXIV. 9
<i>Apollo Musagetes, etc.</i> - -	Pl. XXXIV. 11, 12 -	Pl. XXXIV. 10
<i>Athene handing a helmet and spear to Peleus</i>	Pl. XXXIV. 24 - -	Pl. XXXIV. 25
<i>Leda and the swan</i> - -	Pl. XXXIV. 30 - -	Pl. XXXIV. 31
<i>Venus fastening her sandal</i> -	Pl. XXXIV. 38 - -	Pl. XXXIV. 39
<i>Rustic butcher</i> - - -	Pl. XXXV. 5 - -	Pl. XXXV. 6
<i>Hercules and the Nemean Lion</i>	Pl. XXXV. 7 - -	Pl. XXXV. 8
<i>Fisherman</i> - - -	Pl. XXXV. 13 - -	Pl. XXXV. 14
<i>Eleusinian mysteries: sacrifice of a pig</i>	Pl. XXXVI. 1-4 - -	Pl. XXXVI. 5 <sup>1</sup>
<i>Romulus and Remus</i> - -	Pl. XXXVI. 22 - -	Pl. XXXVI. 23
<i>Dog chasing hare</i> - - -	Pl. XXXVI. 30-32 -	Pl. XXXVI. 33
<i>Sitting hare</i> - - -	Pl. XXXVI. 34-37 -	Pl. XXXVI. 38-40

<sup>1</sup> An interesting example of the survival of a mutilated portion of an older representation.

*B. Central Gaulish Decoration.*

The decoration characteristic of the earlier potters of Lezoux has already been treated in association with that of contemporary South Gaulish work.<sup>1</sup> Towards the end of the first century a definite exportation began from this pottery-centre, especially to Britain, and we find BVTRIO and LIBERTVS (both belonging to this period and a little later) continuing to practise the free-style decoration (just described), which was handed down to them by their immediate predecessors GERMANVS and BIRACILLVS, if, indeed, they were not partly contemporary with these potters.

Apart from this wholesale adoption of a specific South Gaulish style, it will be found that much of the detail-ornament of South Gaul was employed in a modified form by the potters of Lezoux, most of whom may be dated to the second century. Thus we find the continuous scroll (large type) frequently occurring in the mid-second century ware of Lezoux (Pl. XII. 3 CINNAMVS). Other *motifs*, such as detached leaves and festoons or large medallions (Pl. XII. 4 CINNAMVS), owe their origin to South Gaul. Similarly, the metope or panel scheme of decoration with its St. Andrew's Cross (frequently much attenuated in Lezoux work, Pl. VIII. 7 DIVIXTVS) was also derived from the Rutenian potters as well as the caduceus-like ornament (Déch. III3, III3 A, III4, III5).

A few ornamental details, such as two dolphins with intertwined tails (Déch. 1060, a zodiacal design) and the dolphin encircling a trident (also occurring at Pompeii), may be traced directly or perhaps through Banassac to Arretium (Pl. XXIV. 7), but the immediate influence of Italian ceramic design on Central Gaulish Sigillata is difficult to trace, except in the work of the earliest potters of this district, such as ATEPOMARVS.

In spite of the fact that a certain number of ornamental types characteristic of South Gaul penetrated in a more or less modified form into the decorative schemes of the Central Gaulish potters, yet the general effect of the two types of decoration is strikingly different and can be readily recognised. If a comparison is made between the Flavian examples of Form 37 on Pl. XIV. 1-7 with the fragment, Fig. 8, on the same plate belonging to the Hadrian-Antonine period, or with the CINNAMVS bowl (Pl. XII. 4), the difference becomes apparent at the first glance. The contrast is obtained by the almost exclusive elimination in the second century fabric of ornamental *motifs* derived from plant-life,<sup>2</sup> concomitantly with the adoption and substitution of figure-subjects. In the former case a conventionalised naturalism is manifest, whilst in the latter a formal arrangement of figure-subjects has become prevalent. The figure-subjects of Lezoux were, however, rarely derived from South Gaulish prototypes. Déchelette (i. p. 243) enumerates only twenty figure-types common both to South and Central Gaul. This list, in the light of recent research, admits of some additions as well as deletions.

<sup>1</sup> For an example of an early Flavian Form 37, see Pl. XXIX. 9.

<sup>2</sup> Note, however, the exception of the large winding-scroll.

The occurrence of similar types at both these pottery centres may be accounted for, to some extent, by the migration of the potter, and consequently the similarity may be more apparent than real. Thus certain types in the early work of MERCATOR, *e.g.* Diana and the small hind (Déch. 63), and Hercules in the garden of the Hesperides (Déch. 468), as well as many of his ornamental *motifs*, appear to be specifically South Gaulish in character. Although some of this potter's work was produced at Lezoux, he had previously manufactured Forms 29 and 37 at Montans.

The slightness of the influence of Rutenian figure-types upon those of Lezoux is emphasized by the fact that amongst the figures of BVTRIO and LIBERTVS one searches almost in vain for an example which may be traced to a South Gaulish prototype.<sup>1</sup>

It is therefore evident that just as there are few figure-types of South Gaul which can be traced directly to Arretine ceramics, similarly there are but few at Lezoux which betray a Rutenian origin. In both cases, indeed, the ultimate sources of inspiration are the same, *viz.* Augustan (and perhaps also contemporary) toreutic art, Neo-Attic reliefs and Hellenistic sculpture.

The influence of the metal worker is demonstrated, not only in the delineation of figures, but also in the introduction of new forms, such as the beaker Form 64 and the dish Form 71, both of which are associated with the name of LIBERTVS. Form 64 is clearly an imitation of the Berthouville silver vase (cf. Pl. XXI. 4-6 with Pl. XXII. 3), whilst Form 71 shows a close analogy to the silver pateræ at Vienna and Belgrade (cf. Pl. XX. 6 with Pl. XXVII. 4).

Amongst the many figure-types of Lezoux which owe their inspiration to Græco-Roman sources, the following are illustrated in our Pls. XXXIII.-XXXVI. :

GRÆCO-ROMAN CERAMICS, MARBLE, TERRA-COTTA AND TOREUTIC.				PROVINCIAL SIGILLATA.	
<i>Pigmies and Cranes</i>	-	-	Pl. XXXIII. 40	-	Pl. XXXIII. 41
<i>Diana with bow</i>	-	-	Pl. XXXIV. 13	-	Pl. XXXIV. 14
<i>Apollo Musagetes, etc.</i>	-	-	Pl. XXXIV. 15, 17, 20	-	Pl. XXXIV. 16, 18, 19, 21
<i>Actæon</i>	-	-	Pl. XXXIV. 22	-	Pl. XXXIV. 23
<i>Neptune</i>	-	-	Pl. XXXIV. 26, 28	-	Pl. XXXIV. 27, 29
<i>Venus Anadyomene, Medici and with cestus</i>	-	-	Pl. XXXIV. 34, 36, 40	-	Pl. XXXIV. 35, 37, 41
<i>Farnese Hercules</i>	-	-	Pl. XXXV. 9	-	Pl. XXXV. 10 (CIBISVS of East Gaul)
<i>Hercules</i>	-	-	Pl. XXXV. 11	-	Pl. XXXV. 12
<i>Alexander</i>	-	-	Pl. XXXV. 15, 16	-	Pl. XXXV. 17
<i>Hector and Ajax</i>	-	-	Pl. XXXV. 18	-	Pl. XXXV. 19
<i>Polymnia</i>	-	-	Pl. XXXV. 20	-	Pl. XXXV. 21, 22

<sup>1</sup> An exception should be noted in a vessel, Form 64, probably by LIBERTVS (Diana and the small hind, Déch. 63 A, Pl. XXI. 6).



GRÆCO-ROMAN CERAMICS, MARBLE, TERRA-COTTA AND TOREUTIC.				PROVINCIAL SIGILLATA.			
<i>Niobid</i> -	-	-	-	Pl. XXXV. 23	-	-	Pl. XXXV. 24
<i>Aesculapius</i> -	-	-	-	Pl. XXXV. 25	-	-	Pl. XXXV. 26
<i>Victory</i> -	-	-	-	Pl. XXXV. 27	-	-	Pl. XXXV. 28
"				Pl. XXXVI. 6	-	-	Pl. XXXVI. 7
<i>Europa on bull</i> -	-	-	-	Pl. XXXVI. 12	-	-	Pl. XXXVI. 13
<i>Meleager and boar</i> -	-	-	-	Pl. XXXVI. 14	-	-	Pl. XXXVI. 15
<i>Nymph holding shell</i> -	-	-	-	Pl. XXXVI. 16	-	-	Pl. XXXVI. 17
<i>Paris receiving diadem from Minerva</i>				Pl. XXXVI. 18	-	-	Pl. XXXVI. 19
<i>Bellerophon and Pegasus</i> -				Pl. XXXVI. 20	-	-	Pl. XXXVI. 21
<i>Hercules at the wedding of Peleus and Thetis</i>				Pl. XXXVI. 24	-	-	Pl. XXXVI. 25
<i>Castor</i> -	-	-	-	Pl. XXXVI. 26	-	-	Pl. XXXVI. 27
<i>Hermes</i> -	-	-	-	Pl. XXXVI. 28	-	-	Pl. XXXVI. 29

Although many of these figure-types were transferred by LIBERTVS from classic sources to vessels of Terra Sigillata, the foregoing remarks will have served to indicate that he must not be regarded as the pioneer in this work of transference, but that, on the contrary, the process had already commenced in South Gaul.

### C. East Gaulish Decoration.

The decorative schemes of the East Gaulish and Trans-Rhenish potters cannot be regarded as a continuous and progressive development, as in the cases of South and Central Gaul, either from the evidence of detail-ornament or figure-types. On the contrary, the East Gaulish wares and styles of decoration (with a few notable exceptions to be considered later on) should be viewed as a lateral off-shoot from the main stream of evolution. At first the East Gaulish Sigillata possessed some artistic merit by the inherent quality of intelligent imitation, *e.g.* in the work of SATTO (Pl. XX. 3), the "potter of the helmet and shields" (Pl. XVII. 1 Luxeuil<sup>1</sup>), the "potter of the small medallions" (Pl. XII. 5 Heiligenberg), and early fabric at Trèves (Pl. XVIII. 1). Subsequently, however, with rare exceptions, the history of East Gaulish Sigillata becomes merely a record of degeneration and barbaric decadence.

Commencing at a time when South Gaulish ceramic art had reached its zenith, and when the great period of activity at Lezoux had begun, it borrowed much from both sources, only occasionally showing some signs of originality and independent development, *e.g.* in the work of the potters SATTO, DEXTER and CENSOR (Pl. XVII. 4; Pl. XVIII. 3, 2).

<sup>1</sup> See also an early East Gaulish bowl, style of GERMANVS (Curle, *Terra Sigillata*, probably Luxeuil fabric, decorated after the Figs. 24 (1), 24 (2).

The indebtedness of the potters of East Gaul to those of South Gaul is clearly demonstrated by the use of such detail-ornaments as the following :

- (a) Wavy line for delimiting designs from each other and from the ovolo (Pl. XVII. 5 TRIBVNVS).
- (b) Arrow-heads bounded by oblique wavy lines (Fölzer, Pl. I. 10).
- (c) Continuous scrolls (Pl. XX. 3 SATTO : Pl. XVII. 1, 2).
- (d) The cuneiform spurred leaf (Pl. XVII. 1 ; Pl. XVIII. 1).
- (e) The St. Andrew's Cross *motif* (Fölzer 258, 259).
- (f) Corner-tendrils (Fölzer, Pl. II. 1 SATTO).
- (g) Grass-tufts (Fölzer 228).
- (h) The small, straight wreath as a bordering to the design (Pl. XVII. 1, 6, 8 ; see also Fölzer 901 and Oelmann, Pl. VII. 8, 13, 16, 24, 28, 29).

Their indebtedness to the same source is shown by the general preference (in early East Gaulish ware) for animal life in contradistinction to the human figure. Some of the figure-subjects (more particularly those of the early potters) may also be traced to South Gaul, *e.g.* Pan and a Siren (Fölzer 3, 4), Diana and the small hind (Fölzer 478, 479), and the Satyr with the double flute (Pl. XVIII. 1). But the majority of the East Gaulish figure-types were inspired by Lezoux, and amongst these may be mentioned the following subjects :

Pigmies fighting cranes (Fölzer 219 ; Knorr, *Rottenburg*, Pl. XVII. 1 CERALIS ; already depicted on Greek vases).

Actæon (cf. Déch. 74 with Pl. XVIII. 5 ALPINVS).

Diana and the large hind (cf. Déch. 64 with Pl. XVII. 8, Trèves ware).

Ship of Ulysses (Fölzer 327).

Prometheus and the eagle (cf. Déch. 8 with Fölzer, Pl. XIII. 10).

In the example of Trèves ware figured on Pl. XVII. Fig. 8, we find a not uncommon occurrence in East Gaulish fabric, viz. the combination on the same bowl of types derived respectively both from South and Central Gaul. Thus Diana and the small hind (Déch. 63 A) is characteristic of South Gaul, whilst Diana and the large hind (Déch. 64) is definitely a Central Gaulish type. Some stress should be laid upon this point, for it emphasises the fact that the ornament and decoration of East Gaul does not permit of so strict a chronological interpretation as in the cases of South and Central Gaul, inasmuch as it consists in the main of a *pot pourri* of elements derived from both these sources.

As already indicated, a few East Gaulish potters evinced a certain independence of the designs handed on to them by the *officinæ* of South and Central Gaul. The versatile potter SATTO, who commenced his career in

South Gaul, and whose work bears much evidence of his origin, sometimes produced designs which were evidently inspired by non-Sigillata prototypes. Thus his scene of cupids at the vintage (Pl. XVII. 4) bears a close affinity to the decoration of a sarcophagus on the Esquiline Hill. (See also Pl. XXXV. 1, from a sarcophagus at Arles: *putti* gathering olives.<sup>1</sup>)

Again, the work of DEXTER of Trèves displays only slight evidence of any inspiration from South or Central Gaul. He drew his types for the most part from earlier sources, such as Arretine ceramics and Alexandrian toreutic art. His predilection for garlands suspended from columns recalls a favourite *motif* of the Arretine potter (cf. Pl. XVIII. 3 DEXTER with Pl. XXIV. 1 P. CORNELIVS/ANTIOCVS). Furthermore, some of his types, such as busts of deities, appear to have been derived from Celtic sources, *e.g.* from the silver cauldron of Gundestrup or the "week god" vase of Bavay (Fölzer, p. 62).

Lastly, CENSOR of Trèves displayed considerable originality and derived a number of his types from metal sources. His figures of the Iphigenia legend (Pl. XVIII. 2) have their counterparts on sarcophagi which are still extant at Munich, Weimar and the Villa Albani (Fölzer, *op. cit.* p. 69).

Yet, notwithstanding the exceptional appearance in East Gaul of some originality and independent development, the decadent trend of the industry, both in technique and design, is overwhelmingly evident, and the final efforts of the moribund art of decorated Sigillata are well illustrated in the latest products of Rheinzabern (Pl. XXIX. 10 IVLIVS) and in the third-century fabric of Trèves, as represented on our Pl. XVIII. 5-9 and in Oelmann's *Niederbieber* (Pls. VII. and VIII.).

<sup>1</sup> Cp. Chase, *Cat. of Arretine Pottery*, M. PEREN/TIGRANI, 22, 24 TIGRANI; satyrs Museum of Fine Arts, Boston, Figs. 21 gathering grapes.



## CHAPTER VII

### DETAILS OF CHRONOLOGICAL SIGNIFICANCE

THIS chapter deals with certain decorative details which possess a distinct chronological significance. The treatment of this subject has no pretensions to be exhaustive, and many *motifs* of equal importance have already been noticed in the text.

#### (A) *THE OVOLO MOTIF IN ROMAN PROVINCIAL SIGILLATA.*

##### PL. XXX.

The term "*ovolo*" is applied to the *motif* which is so frequently found to occur as an upper border to the design in decorated Sigillata, viz. on the crater (Form 11), and especially on Forms 30 and 37.

With rare exceptions (*e.g.* in the hybrid Form 29/37, Fig. 112), it is situated at a variable distance beneath the plain rim of the vessels. Typically it consists of a series of U-shaped ornaments (similar to half or three-quarters of an egg) separated by an intervening vertical rod or tongue, and hence the *ovolo* is frequently termed the "egg and tongue" ornament.

#### I. *EVOLUTION.*

It is now generally accepted that the *ovolo* ornament was gradually derived (as Goodyear<sup>1</sup> has pointed out) by a process of evolution from the alternating lotus flower and bud which so frequently form a bordering *motif* in Egyptian art and architecture (Figs. 1, 2, 3).

By a process of conventionalisation, not unusual in decorative art, this *motif* appears in two forms in Greek art: on the one hand, as the anthemion bordering (Fig. 5), and, on the other hand, as the so-called "egg and tongue" bordering (Figs. 4, 6) which is so commonly met with subsequently on Roman Terra Sigillata.

A comparison of our figures will make it evident that the "tongue" is actually the much simplified representation of the lotus flower, which had already been reduced to three petals in Greek art (Fig. 5), and that the

<sup>1</sup> *Grammar of the Lotus*, p. 155.

"egg" has been evolved from the lotus bud, together with its enveloping background, until finally the bud disappears and only the background with its marginal border is left.

## II. IMMEDIATE PROTOTYPES.

The immediate forerunners of the Roman provincial ovolo are met with in Italian *Sigillata*, in Augustan architecture (Fig. 17, from a Roman altar in the Museo delle Terme, in which the tongue is strongly reminiscent of the lotus flower in Egyptian art), in Augustan metal work (Figs. 18, 19, Hildesheim and Arras), and in the approximately contemporary ware of the potter Aco of Northern Italy (Fig. 20).

In *Italian Sigillata* the U or egg-element of the ovolo, although varying considerably in size and other details, is usually fuller and more swollen than in provincial pottery, and it occasionally displays a tendency to adopt a triangular, pointed contour, as in the examples by M. PERENNIVS and his slave BARGATES (Figs. 7, 8). Furthermore, it is generally well spaced, *i.e.* the U-ornaments are not so crowded together as in provincial *Sigillata*, and the tongue is commonly slender and devoid of any terminal decoration, such as rosettes, knobs or prongs, which are so characteristic of South Gaulish ware; but a slight terminal swelling is not infrequent, as in the ATEIVS craters by EVHODVS and XANTHVS (Figs. 11, 12) from Haltern and Foxton.

Occasionally the tongue is altogether absent, as in the bowl by M. PERENNIVS in the Loeb Collection (Fig. 15) and in a Puteolan example by NAEVIVS (Fig. 16).

Not uncommonly the ovolo is bordered along its upper edge by a bead-row, as in examples by M. PERENNIVS and ATEIVS (Figs. 7-9, 12), which would seem to have its prototype in the rosettes of the Egyptian design<sup>1</sup> (Fig. 3). Sometimes the beads are not continuous but are unevenly spaced, being more or less restricted to the upper limits of the tongue and of the U-ornament, as in the example by BARGATES (Fig. 8). It will be seen subsequently that this upper edging of bead-rows was continued on the early South Gaulish bowl of Form 30, in which also a similar unequal spacing of the beads is sometimes evident.

The practice of separating the ovolo border from the decorative design by a zigzag "chain" of alternating cuneiform leaflets is also not infrequent (Figs. 7, 8, 9, 12). It will be shown later on that this mode of demarcation—but in quite another technique—became almost universal in South Gaulish pottery of the Flavian period.

Variants from the usual ovolo type are illustrated, *e.g.* the circular and leaf-like ovolos from Arretium (Figs. 10 M. PERENN/CERDO, and 13), and a simplified variety from Samos (Fig. 14).

<sup>1</sup> Similarly the ovolo of the Erechtheion is surmounted by an astragal motif (Fig. 6).

## III. PROVINCIAL SIGILLATA.

A. *South Gaul.*

In South Gaulish ware the ovolo-*motif* almost always conforms to the normal type, as described above. It does not, however, occur on Form 29, but is occasionally present on the hybrid form 29/37, a product of Central and East Gaul (Fig. 112). Upon Forms 11 and 30 it is found at least as early as the Tiberio-Claudian period,<sup>1</sup> and on Form 30 it was continued uninterruptedly from this date onwards.

The ovolo occurs almost universally on first-century examples of Form 37, but it may occasionally be replaced by other *motifs*, as in a bowl in the style of GERMANVS found at Rottweil (Fig. 52), or, indeed, it may be altogether absent (*Wroxeter* I., Pl. XV. 15 LIBERTVS).

Sometimes it occurs on Form 78 (Fig. 77), and rarely on Form 67 (Fig. 78).

Amongst the features which distinguish the ovolo of South Gaul from that of Italy, the chief and most constant characteristic is the variation in the terminal decoration of the tongue. The variability of this feature is adopted in the following pages as the most reliable criterion for chronological purposes, especially since, in the present state of our knowledge, minute variations in the size and contour of the U-ornament are difficult to interpret. When, however, the U-element of the ovolo is sufficiently distinctive or aberrant—as frequently happens in second-century fabric—due notice will be given to it.

It has already been shown that in the case of Italian Sigillata the ovolo-*motif* not infrequently possesses an additional characteristic in the form of a bead-row along its upper edge, whilst, on the other hand, it is sometimes separated from the general design beneath it by a zigzag "leaf-chain." In Provincial Sigillata these practices were not uncommonly continued in a similar or modified technique, and they constitute a most important auxiliary detail in estimating the chronology of the ovolo-*motif*.

(i) *The Pre-Flavian ovolo* is an obvious development from that of Italian Sigillata. Three main types may be distinguished:

- (a) The ovolo with the *simple, undecorated tongue*. This is evidently a direct copy of the prevalent Italian type, and occurs on the early South Gaulish crater, Form 11, at Hofheim I. and Roanne (Figs. 21, 22 VOLVS) as well as on early examples of Form 30, as at Hofheim I. (Fig. 23). This Italic type of ovolo occurs on most of the examples of the Gaulish crater recently found at Bregenz. They date to the reign of

<sup>1</sup> The Colchester bowl (Fig. 26) with its upper edging of beads is almost certainly pre-Claudian.



Tiberius (Knorr, *Terra Sigillata*, 1919, Pls. 1 C, 2 D, E, F, 3 M, N, P).

- (b) The tongue which terminates in a *plain circle* or in a *rosette* is, however, the most frequent pre-Flavian type. In the first occupation of Hofheim this terminal decoration of the tongue is the usual one, the only exceptions being four or five examples of the simple form already described (under (a)). The following instances of circles or rosettes are illustrated:

Form 11,	Hofheim I.	(Fig. 24, circle).
„ 30,	Colchester	(Fig. 26, star-rosette).
„ „	Hofheim I.	(Figs. 25, star-rosette; 27, 31 and 37, circles).
„ „	London	(Fig. 28, star-rosette, Bedfordshire; 32 MASCLVS, circle, 34 MASCLVS, star-rosette).
„ „	Strasbourg	(Figs. 29, 38, circles).
„ „	Aislingen	(Fig. 30, style of BASSVS, rosette).
„ „	Asberg	(Fig. 33, MASCLVS, rosette).

- (c) The ovolo in which the terminal is furnished with a *pyriform swelling* is occasionally met with, as in the bowl, Form 30, by the potter MASCLVS, recently found in King William Street, London (Fig. 35).

*Associated bead-rows and wavy lines* in the pre-Flavian period.

A reference to the illustrations will show that in the majority of these pre-Flavian vessels the ovolo is surmounted by a bead-row or a wavy line, but that occasionally no decorative *motif* is found in this situation (Figs. 21, 22, 38). The bead-row occurs on some of the earliest bowls, such as the Colchester vessel (Fig. 26) and those from Hofheim I. and Strasbourg (Figs. 25, 29). This technique is derived directly from Italy, where, as we have already seen, it was practised by various Arretine potters. Some evidence of discontinuity or unequal spacing in the bead-row is seen in the work of the Italian potter BARGATES (Fig. 8), and this method of grouping was even more thoroughly carried out in the Colchester and Hofheim bowls (Figs. 25, 26).

The wavy line situated immediately *above* the ovolo is also a common characteristic of pre-Flavian bowls of Form 30 (Figs. 27, 28, 32-36). Rarely a bead-row may be found *below* the ovolo, as in the Claudian example from Hofheim (Fig. 31). Quite exceptionally, as in the Nero-Vespasian example from Vindonissa (Fig. 39), the wavy line is found not only *above*, but also *below* the ovolo. Almost invariably, however, in bowls of definitely pre-Flavian origin, *no ornamental motif separates the ovolo from the decorative design*.

(ii) In the *Flavian period* most of the ovolo types already described continued to be produced, but in addition a new type became prevalent, viz. the ovolo with *multifid tongue*:

- (a) The ovolo with a *simple tongue* is somewhat rare, but is of occasional occurrence, as at Pompeii (Fig. 56).
- (b) The ovolo with a *circular* or *rosette terminal* is a frequent type, as at Hofheim II. (Fig. 57), Pompeii (Figs. 58, 62, 73), Newstead I. (Figs. 42, 43), Rottweil (Figs. 46 PAVLLVS, 47, 53, 55) and Margidunum (Fig. 61). Both the circular and the rosette terminal were continued through the Domitian-Trajan period (Fig. 70, Bregenz cellar).
- (c) The ovolo with a *pyriform* or *knobbed terminal* is occasionally met with, as at Pompeii (Figs. 75, 76). In the first century it is an unusual circumstance for the terminal swelling to be bent at an obtuse angle to its stem (Fig. 74).
- (d) Occasionally the tongue is altogether absent, as at Hofheim II. and Pompeii (Figs. 45, 72)—a practice already in evidence in Italian work (Figs. 9 M. PERENNI/NICEPHOR, 16 NAEVIVS).
- (e) The *multifid terminal*, furnished with three or more teeth or prongs, is highly characteristic of the Flavian period. Indeed, at this date, it mainly shares the field with the circular or rosette terminal already described. The device of dividing the terminal into minute teeth or prongs practically coincides with the advent of the Flavian period, for no earlier and demonstrably pre-Flavian example has as yet been recorded. Perhaps the earliest specimens are to be found in the work of the potter GERMANVS (Figs. 40, 41 on Form 30; Figs. 49, 50 on Form 37), some of whose decorated vessels probably ante-date the accession of Vespasian. The ovolo of this potter is characteristic and peculiar, and is easily distinguished by the truncation of its multifid terminal with four or five teeth. Another characteristic of his ovolo is distinctive of pre-Flavian conditions, inasmuch as he did not separate his ovolo from the general design by a wavy line or bead-row, as in the case of Flavian potters generally (Figs. 40, 41, 50).

But the most common multifid type in the Flavian period is the *trifid terminal*, i.e. with three distinct prongs (Fig. 64 MOMMO, Form 37, Pompeii). It occurs on Flavian bowls of both Form 30 and 37, but less frequently on the former, in which the older rosette or circular terminal still predominates. The following examples may be noted:

Form 30: Rottweil, Pl. IX. 8. See also Knorr, *Rottweil*, 1912, Pl. XVI. 2, 3, 17.

Newstead I.; see Curle, *Newstead*, p. 211, 1.

Form 37: Newstead I. (Figs. 59, 60; see also our Pls. XI. 8, XIV. 2).

Pompeii (Figs. 63, 64; see also our Pls. XIV. 3, XV. 3).

The trifid terminal is common to many Flavian potters, such as MOMMO (Fig. 64), BIRACILLVS (Fig. 66), CRVCVRO (Fig. 67) and MERCATOR (Fig. 68).

At Hofheim the trifid terminal is not represented in the Claudian period, but it occurs in the Vespasian occupation of this fort on a fragment of Form 37 (Ritterling, *Hofheim*, Abb. 52, Fig. 7).

The multifid terminal is found in the latest products of South Gaul, as in the Strasbourg bowl, Form 30 (Fig. 48), and in vessels of the Domitian-Trajan period found at Bregenz (Fig. 71).

*Associated bead-rows and wavy lines* in the Flavian period.

With the advent of the Flavian period, a change of technique in the arrangement of the associated wavy line and bead-row becomes evident. It has already been shown that the bead-row or wavy line is almost invariably situated *above* the ovolo in pre-Flavian fabric, but in ware of the Flavian period<sup>1</sup> these *motifs* become displaced to a position immediately *below* the ovolo, thus separating it from the general decorative design. With the exception of bowls (Form 37) by the potter GERMANVS,<sup>2</sup> the ovolo on Flavian examples of the hemispherical bowl is almost invariably separated from the decorative design by a wavy line or bead-row.

Thus this technique is an almost constant feature in bowls (Form 37) from Pompeii,<sup>3</sup> as illustrated by Déchelette and Atkinson, as well as in the examples of this vessel found in the Vespasian period at Hofheim. A similar demarcation is present in Flavian hemispherical bowls found in the north of England, e.g. Corbridge, Carlisle, Newstead and Camelon (see Curle, *op. cit.* and Bushe-Fox, *Arch.* 64). Similarly, at Rottweil (with the sole exception of the fabric of GERMANVS) the separating *motif* of a wavy line or bead-row is constantly present in hemispherical bowls of the Flavian period.<sup>4</sup>

<sup>1</sup> A few exceptions occur on Form 30 (Figs. 42, 43, Newstead I.; Fig. 44, Hofheim II.), and consistently in the signed bowls of the Nero-Flavian potter GERMANVS.

<sup>2</sup> Of the three bowls (Form 37) without a demarcating line, illustrated by Walters, *C.R.P.*, the specimens M 474 and M 503 are evidently by GERMANVS, and M 483 appears to be the only true exception.

<sup>3</sup> Rarely, a straight wreath is superimposed above the wavy line (Atkinson, *Pompeii*, Figs. 54 MOMMO and 55).

<sup>4</sup> The *wavy line* is by far the most common mode of demarcation on Form 37 in the Flavian period. Thus at Pompeii the *bead-row* only occurs sporadically (Fig. 72).



Occasionally in bowls of Form 37 of the Flavian period a bead-row (but more commonly a wavy line) is found both *above* and *below* the ovolo, as at Pompeii (Fig. 56), Rottweil (Figs. 53, 55); thus in these vessels both the earlier and the later techniques are combined. A similar arrangement has already been demonstrated on some cylindrical bowls of the Nero-Vespasian period (Fig. 39).

The wavy line or bead-row is commonly found as a demarcating *motif* between the ovolo and the general design in bowls of the Domitian-Trajan period, as at Strasbourg and Bregenz (Figs. 48, 70, 71). This method of separating the ovolo from the design, although occurring almost invariably so late as the Flavian period in Provincial Sigillata, had already been practised by the later Italian potters who employed a zigzag "detached leaf-chain" *motif* (Figs. 9 M. PERENNI/NICEPHOR and 12 CN. ATEI/XANTHI). In these cases, however, it is situated at a greater distance from the ovolo.

Thus the devices of dividing the terminal into prongs, and of separating the ovolo from the general design by means of a *wavy* line, coincide approximately in point of time, for both appear to have originated in the early Flavian period.

Furthermore, it was in this period that the association of the multifid terminal with the wavy line or a bead-row became almost constant. The chief and most consistent exception occurs, as has already been pointed out, in the decorated wares of the potter GERMANVS.

#### B. *Central and East Gaul, i.e. second century and later Sigillata.*

The ovolo *motif* of the second century, whether produced at Lezoux or in East Gaul, was subjected to a more varied treatment than in South Gaul, and this variability in design is especially marked in the decorated fabric of the East Gaulish potters.

At the same time, however, most of the ovolo types already described continued to be produced.

(i) The ovolo with a *plain* or *simple terminal* (or a terminal furnished with merely an indeterminate swelling) became more frequent throughout the second century (Figs. 85 COBNERTVS, 86 IVSTVS, 93 CINNAMVS).

(ii) The *circular* or *rosette* terminal is often found in Central and East Gaulish ware of the first half of the second century, *e.g.* :

Lezoux : Figs. 79 and 80 BVTRIO ; 83 DIVIXTVS ; 87, 90 PATERNVS.

East Gaul : Figs. 117 SATTO ; 118 and 121 Luxeuil ; 111 CIRIVNA.

It occurs as late as the third century, *e.g.* at Niederbieber (Fig. 109).

(iii) The *multifid* terminal is infrequent among the ovolo-*motifs* of Lezoux (Fig. 95 Colchester, style of ALBVCIVS). On the other hand, the three-pronged terminal (or a modification) is not uncommon in the work of the early East Gaulish potters, and furnishes yet another proof of the profound influence of South Gaul upon the later and more easterly pottery centres

(Fig. 123 La Madeleine ; see also Knorr, *Rottweil*, 1907, Pl. XVIII. 2, and *Rottenburg*, Pl. VII. 2, 8, 12). The Heiligenberg "Potter of the small medallions" also adopted this *motif* in a modified form (Fig. 108).

(iv) The *ovolo devoid of any tongue* is often met with in East Gaulish work (Figs. 96, 97 IANVS ; 100, 102, 103 REGINVS ; 110 VALENTINVS ; 113 CIBISVS). In Lezoux ware, however, this type is relatively infrequent (Fig. 94 CENSORINVS). Specimens from Silchester (Fig. 104) and Wroxeter (Fig. 105) are probably East Gaulish.

(v) The *asymmetrically* placed tongue is not uncommon in second-century Sigillata, when it often adheres to one side of the U-ornament (Figs. 90 PATERNVS ; 91 and 92 CINNAMVS). In South Gaulish ware, on the other hand, the tongue is usually placed approximately in the centre, and it is only exceptionally asymmetrical (Fig. 74 Pompeii ; Déchelette, i. Pl. IX. 1 ; Curle, *Newstead*, i. 207, 2).

(vi) The *corded* tongue first appeared in the Flavian period (Fig. 40 GERMANVS), but is rare in South Gaulish Sigillata. About the "turn" of the first and second centuries it is found in the work of the Lezoux potter BVTRIO (Fig. 79), and subsequently becomes frequent both at Lezoux and in East Gaul (Fig. 87 Lezoux ; 83 DIVIXTVS ; 93 CINNAMVS ; 107 DEXTER ; 119 ALBILLVS ; 120 AVITVS). See Appendix.

(vii) The tongue with an *angular terminal swelling* first appeared in the Flavian period (Fig. 65 MEMOR, Pompeii). It became relatively frequent in the second century both in Central and East Gaul (Figs. 91 and 92 CINNAMVS ; 116 CENSOR of Trèves).

(viii) The terminal in the form of a *cross* appears to be confined to East Gaul (Fig. 119 ALBILLVS ; 120 AVITVS).

(ix) Distinctive *aberrant* *ovolos*. Divergence from the normal type of *ovolo* (as described on p. 145) had already become differentiated in Italian ware of the Augustan period (Fig. 10 M. PERENNI/CERDO ; 13 Arretium), and was occasionally evident in both South Gaulish (Fig. 52 style of GERMANVS) and Lezoux (Pl. XXIX. 9) fabric of the Flavian period.

In the second century, however, the variations of this bordering *motif* became more pronounced, and the following examples are noted and illustrated :

- (a) LIBERTVS. This potter decorated his bowls (Form 37) with an *ovolo motif* consisting of a series of circles alternating with vertical rods (Fig. 81),<sup>1</sup> thus imitating the Arretine circular *motif* of M. PERENNIVS (Fig. 10). Some of his later work may even be devoid of an *ovolo* (Bushe-Fox, *Wroxeter I.* Pl. XV. 15). The potter BVTRIO also occasionally produced the circular *ovolo*, but more commonly conformed to the normal type (Figs. 79, 80).

<sup>1</sup> This *ovolo* also occurs on a Form 71 by LIBERTVS now in the Plicque Collection.

- (b) DOECCVS made use of a monogram of the letter D apposed face to face; **DD** (Fig. 122 Wroxeter).
- (c) A *Maltese cross* is characteristic of ALBILLVS of La Madeleine.
- (d) A variety of types is found on bowls by IANVS, e.g. Fig. 96 without tongue, 97 triangular, 98 normal type, and 99 wreath-motif.
- (e) A similar variety of types was utilised by REGINVS, e.g. Fig. 100 without tongue, 101 wreath-motif, 102 triangular, 103 without tongue and ornamented with rays like the spokes of a wheel.
- (f) An ovolo of *little urns* is peculiar to DEXTER, Fig. 107.
- (g) CIBISVS used an ovolo without tongue and with radially striated U-ornament, Fig. 113.
- (h) The *circular ovolo*, with or without an intervening tongue, is not uncommon in East Gaulish ware (Figs. 106 Trèves school, 115 Newstead II.).
- (i) The *spiral ovolo-motif* occurs on early East Gaulish ware (Fig. 114 Wroxeter; see also Fölzer, Pl. I. 20).
- (j) The *wreath-motif*, in place of an ovolo, has already been noted in the work of GERMANVS, IANVS and REGINVS. Its fore-runner in Italian fabric is shown in Fig. 13. See also a bowl at Wroxeter (*I. Report*, Pl. XV. 14).
- (k) A terminal with a *right-angled bend* is characteristic of CENSOR of Trèves, Fig. 116.
- (l) Further variants:

An ovolo, in which every alternate tongue is missing, is characteristic of CAMBO of Eschweilerhof (Fölzer, Pl. VIII. 12, 16). This feature is sometimes shared by SECVNDINVS, AVITVS and CERALIS.

Mask ovolos, either full-faced (Pl. XXIX. 3 RANTO) or in profile (Pl. XXIX. 2 Lezoux fabric).

Conventional leaf ovolo (Pl. XXIX. 4 second century).

Ovolo with double tongue (Curle, *Terra Sigillata*, Fig. 34, Trèves bowl).

#### *Associated demarcating motifs.*

In the second century, both in Central and East Gaul, by far the most frequent *motif* for separating the ovolo from the design is the

- (a) *Bead-row* (Figs. 81 LIBERTVS, 83 DIVIXTVS, 90 PATERNVS, 91 CINNAMVS, etc.). Not infrequently (and especially in East Gaulish ware) there is a total absence of any demarcating *motif* (Figs. 93 CINNAMVS, 102 REGINVS, 107 DEXTER, 110 VALENTINVS, etc.)—a rare and exceptional occurrence in South Gaulish ware of the Flavian period.



- (b) The *wavy line*, so characteristic a demarcating *motif* in the Flavian products of South Gaul, was continued in the work of transitional potters, such as BVTRIO (Figs. 79, 80). When it appears at a later date, it is chiefly associated with free-style decoration (Fig. 86 IVSTVS; and Fig. 124; see also Curle, *Newstead*, p. 221, 4, and Déchelette, i. Pl. XII. 1). Further examples of the employment of the wavy line by Lezoux potters are seen at Wroxeter (*III. Report*, Pl. XXV. 1 and XXVI. 2, 4); but generally speaking, it is relatively uncommon in the typical second-century fabric of Lezoux.

Similarly, in early East Gaulish ware the influence of South Gaul is evidenced by the frequent use of the wavy line as a demarcating *motif* by the Luxeuil "potter of the helmet and shields" (Fig. 121; Walters, *C.R.P.*, M 1514; M 1274). It is also seen in the work of the later potter TRIBVNVS (Fig. 125).

- (c) The "*bead and reel (astragalus)*" *motif* is occasionally met with in the earlier two-thirds of the second century (Figs. 87 Margidunum, 82 COBNERTVS; see also CENSORINVS, Lezoux, Fölzer, Fig. 5, p. 69). It was probably copied directly from metal vases (cf. Fig. 19).
- (d) A simple band of *rouletting* is of rare occurrence in separating the ovolo from the general design (Fig. 85 COBNERTVS; see also Déchelette, i. Fig. 121 PATERNVS).
- (e) The *cable motif* is chiefly characteristic of East Gaulish ware (Figs. 96 IANVS, 100 REGINVS, 109 Niederbieber).

A wavy line or bead-row situated above the ovolo is of exceptional and rare occurrence (Fig. 122) in the second century. It has already been pointed out that this feature is essentially confined to pre-Flavian work.

### C. The identification of unstamped bowls by means of the ovolo-motif.

As a natural and logical sequel to the foregoing general description of the various types of ovolo in the order of their successive appearance, it remains for us to consider the problem of interpreting certain characteristics of this design in a more particular and specific manner.

This problem may be clearly and succinctly stated by putting the two following questions:

- (a) Is it possible, by means of the ovolo, to ascribe certain unstamped bowls and fragments to potters whose signed bowls are decorated with the same type of ovolo?
- (b) Is it possible to classify vessels with the same ovolo as the work of one and the same potter?

The answer to both these questions is in the affirmative, but within certain limits.

Déchelette was the first to demonstrate that this could be done in the case of the hemispherical bowls of *LIBERTVS*,<sup>1</sup> the majority of which are furnished with a distinctive ovolo (Fig. 81). Subsequently this subject has been studied by Knorr,<sup>2</sup> Hähnle,<sup>3</sup> Atkinson,<sup>4</sup> and others, and considerable progress has been made. Hähnle, for instance, points out *inter alia* that in the later work of M. *PERENNIVS*, e.g. in that of his slaves *BARGATES*, *CRESCENS* and *SATVRNINVS* the ovolo is usually separated from the design by a bead-row or rod-chain. Similar technique is also found in a piece by *NICEPHOR* (Fig. 9), another late worker in the same *officina*. This technique, when specifically applied to the products of this workshop, appears to be of some chronological value,<sup>5</sup> but it should be noted that the practice of *not* separating the ovolo from the general design occurs both early (Fig. 15 *PERENNI/CERDO*) and late (P. CORNEL Loeb Coll. Pl. XXI. 274; *PRIMVS* *ibid.* Pl. XXI. 261; *RODO* *ibid.* Pl. XI. 207 and Pl. XVIII. 168; *RASIN/CERTVS* *ibid.* Pl. VII. 223) in Augustan Sigillata.

An enquiry carried out on these lines will probably be fruitful and lasting in its results, if not pushed to extremes on insufficient evidence. In the first place, it is based on the assumption that the potter in question only employed a single type of ovolo stamp for the vast majority of his bowls throughout his working career and that no other potter employed the same pattern of ovolo. The ovolos of few potters will stand so stringent a test, and in the present state of our knowledge, the ovolos of *GERMANVS*, *LIBERTVS*, *MEMOR*, *DOECCVS* and *DEXTER* are the only cases which pass more or less successfully through the ordeal. The chief characteristic points in connection with the stamps of these potters have already been noted. Here, however, it may be stated that even *GERMANVS* probably employed on occasions a wreath-motif (Fig. 52) in place of his typical ovolo,<sup>6</sup> and that the circular ovolo of *LIBERTVS* was occasionally adopted by *BVTRIO*.

In order, therefore, to attain success in applying the identification test to the ovolos of unstamped fragments or bowls, two essential conditions should always be borne in mind, viz. :

- (a) The ovolo should be sufficiently distinctive.
- (b) The ovolo must be associated with the decorative designs especially characteristic of the potter with whose work it is hoped to identify the unstamped fragment.

<sup>1</sup> Déchelette, i. p. 185.

<sup>2</sup> Rottweil, 1907, p. 26, and *passim* in his other works.

<sup>3</sup> *Die Relieffelche aus Haltern*, *Mitt. d. Altertumskom. für Westfalen*, 1912, vol. vi. p. 71.

<sup>4</sup> *Journ. Roman Studies*, 1914, vol. iv. pt. 1, p. 366 sqq. "The Potter of the Large Rosette," Figs. 39-53.

<sup>5</sup> It is, however, not peculiar to the later slaves of *PERENNIVS*, for it appears on the Foxton crater by *XANTHVS*, one of the later slaves of *ATEIVS* (Fig. 12).

<sup>6</sup> The Rottweil bowl (Fig. 51), with a circular terminal and no demarcating line between the ovolo and the design, appears to be another departure on the part of this potter.



The work of the potter GERMANVS perhaps most clearly fulfils these conditions, for the multifid truncated terminal of his ovolo appears to be demonstrably peculiar to him (Figs. 40, 41, 49, 50), and it is furthermore *not* associated with any wavy line separating it from the main design. In addition this ovolo is accompanied by well-designed decorative types,<sup>1</sup> which are remarkably distinctive of his early Flavian work. Amongst these types we may mention the sitting stag, the female panther and the wild boar, all of which frequently appear free in the field amongst characteristic trees (Pls. XI. 7, X. 4). The figure bearing a thyrsus on the left shoulder and a torch in the right hand (Déch. 353), standing in the concavities of a two-leaved scroll, is particularly characteristic of his work (Pl. IX. 6). When this combination is associated with the typical multifid truncated terminal of the ovolo, the fragment may be regarded as demonstrably the work of GERMANVS, as *e.g.* Walters, *C.R.P.* M 474.

The ovolo of LIBERTVS is distinctive if associated with his free-style, with the possible exception of the work of BVTRIO. Subsequently this type of ovolo appeared in a modified form in East Gaulish work (Fig. 106).

When an ovolo, characterised by the swollen apex of its terminal being bent at an angle, is associated with typically Flavian metope-decoration, the fragment or bowl may presumably be regarded as the work of the potter MEMOR (see Atkinson, *op. cit.*).

The distinctive ovolos of DOECCVS (the  $\alpha D$  monogram) and DEXTER<sup>2</sup> (small urns) of Trèves speak for themselves.

In course of time it will doubtless be possible to assign many other types of ovolo to specific potters. But at present research upon these lines should be prosecuted with constant mental reservations, for (as we have pointed out in the foregoing pages) certain types of ovolo and their accompanying decoration are common to many potters; and although, owing to the presence or absence of a bead-row or wavy line, we can assign them to certain stages of the Sigillata industry, it would in most cases be rash to venture upon a more exact determination.

Some of the reasons for advocating this degree of caution may now be specified :

(a) It may be doubted whether many potters adhered strictly throughout their working life to one particular type of ovolo stamp. Thus MASCLVS employed at least four somewhat different ovolo stamps (Figs. 32-35). GERMANVS in all probability occasionally discarded his typical ovolo and employed a two-leaved wreath (Fig. 52). BVTRIO worked with at least two ovolo stamps, whilst the stamped bowls of IANVS (Figs. 96-99) and REGINVS (Figs. 100-103) are in each case furnished with as many as four ovolo types.

<sup>1</sup> Many of these were, it is true, copied in a less artistic manner by later potters, such as BIRACILLVS.

<sup>2</sup> DEXTER also used an ovolo of normal type

(see Fölzer, Pl. XV. 7). The monogram  $\alpha D$  appears to have been used by two different potters, one working at Lezoux and the other at Blickweiler.



(b) Many ovolo designs, *e.g.* those with a rosette terminal or three-pronged terminal, were common to a number of potters. Thus we find a large rosette occurring in pre-Flavian, Flavian, Trajanic, and Hadrian-Antonine times (Figs. 26, 46 PAVLLVS, 70 Bregenz cellar-find, 87 Margidunum). The three-pronged terminal is common to many Flavian potters (Figs. 64 MOMMO, 66 BIRACILLVS, 67 CRVCVRO, 68 MERCATOR) and occasionally to some of later date (Fig. 123, a La Madeleine potter).

(c) In investigating minute differences in common types of ovolo, the questions of partially worn stamps or of hurried and faulty workmanship must continually be borne in mind.

Notwithstanding all these difficulties in the identification of many of these apparently common types of ovolo, we are persuaded that much progress will yet be made in this direction.

### (B) BORDERING OR DEMARCATING MOTIFS.

#### *Bead-rows and Wavy Lines.*

It is a very general practice for one or other of these *motifs* to form a border to the design, whether this occurs in a frieze, in zones of the transitional style or in panels (metope style), etc.

The *bead-rows* of the provincial potter have been clearly derived from Italian prototypes (Pl. II. 3 ATEIVS, 5 PERENNIVS and TIGRANVS; Pl. XXIV. 2, 4 SATVRNIVS, slave of PERENNIVS, 5; Pl. XXVI. 9). On Arretine ware a bead-row not uncommonly occurs along the upper edge of the ovolo, and also occasionally on each side of a central moulding (Pls. XXIV. 4, 5, XXVI. 4, 9).

Bead-rows are also present on metal work of the Augustan period (Pl. XXII. 11), and may be traced back to Megarian bowls. On a Megarian bowl from South Russia bead-rows are used for marking out hexagonal panels (Pl. XXVIII. 7).

The *wavy line* of the South Gaulish potter, on the other hand, does not appear to be represented in Arretine Sigillata, but it is found on Puteolan Sigillata, where it functions as a leaf-stalk. It is indeed used as a leaf-stalk in the straight wreath of Tiberian examples of Form 29, *e.g.* by DARRA (Knorr, *Terra Sigillata*, 1919, Pl. 32). The use of the typical wavy line as a demarcating *motif* occurs as early as the Claudian period at Hofheim, *e.g.* on Forms 11 and 30 (*vide infra*).

Yet the wavy line is met with in Egyptian decoration from the XVIII. Dynasty onwards; thus the sitting hare of Egyptian hieroglyphs (so common an ornament on South Gaulish Sigillata) is figured above or near a wavy line.<sup>1</sup>

<sup>1</sup> Alessandró della Seta, *Religion and Art*, Fig. 19. See also Maspero, *The Struggle of the Nations*, p. 213.

This association might possibly indicate an Egyptian and Alexandrian source for the South Gaulish *motif*.

It is, however, also possible that the discontinuous zigzag *motif* or "rod-chain" so commonly occurring above the design in Arretine ware (Pl. II. 5, 7, 8) may have influenced the Gaulish development of the wavy line.

(a) *Bead-rows* occur on Form 29, above and below the central moulding (just as on certain Arretine bowls already cited), and they are also generally present above the decoration of the upper frieze.

Large, distinct and widely-spaced beads are especially characteristic of the earliest or Tiberian bowls (Pl. III. 4 *BILICATVS*, 5 *SENICIO*, 6 *SCOTTIVS*, 7; Pl. XXVI. 6 *ACVTVS*; Pl. XXV. 1, 3; Pl. XXVIII. 3). Subsequently, but even as early as the Claudian period, they are usually relatively small and in close juxtaposition (Pl. III. 9 *AQVITANVS*). Yet comparatively large beads may occur occasionally as late as the Flavian period (Pl. IV. 10 from Torre Annunziata; see also Knorr, *Aislingen*, Pl. XVIII. 2, on a late bowl by *PRIMVS* from Vindonissa).

As early as the reign of Nero, the bead-row which borders the top of the upper frieze in Form 29 may be imperfectly represented (Pl. IV. 1 *BASSVS COELVS*); and in the Flavian period it is not infrequently badly represented or even absent.

The employment of bead-rows as a border for metope-decoration in Form 29 occurs both in the Claudian (Ritterling, Hofheim I., Pl. XXIV. 3, 10) and Flavian periods (Pl. VI. 7 *NIGRINVS*). Occasionally the bead-row occurs in the form of elongated coalescent beads, as in a Claudian bowl, Form 29, by *AQVITANVS* (Pl. III. 9), but this exceptional characteristic seems to be peculiar to this potter.

In early examples of Form 30 the bead-row may function as a demarcating border along the upper edge of the ovolo (Pls. VII. 1, 6; Pl. X. 5) exactly as in specimens of Arretine craters, and doubtless derived from this source.

It is somewhat exceptional to find the bead-row as a dividing-*motif* in the transitional and metope-decoration of Form 37 of Flavian or first-century age; but at the turn of the first and second centuries the bead-row is occasionally employed to demarcate the mixed metope-decoration so characteristic of this period (Pl. VIII. 6). In the second century, and especially after the reign of Trajan and in the work of the potters of Lezoux and Heiligenberg, it is indeed the common and characteristic limiting or bordering *motif* (Pl. VII. 3; Pl. VIII. 7 *DIVIXTVS*; Pl. XII. 1 *PATERNVS*; 3, 4 *CINNAMVS*).

(b) *Wavy Lines*. As a border to the decoration or as a delimiting line in metope-decoration, the wavy line is found on Sigillata of the Claudian period, viz. on Form 11 (Pl. IX. 3 Hofheim I.), on Form 29 (Pl. VI. 6

Hofheim I., coalescent beads), and on Form 30 (Pl. VII. 5 and Pl. IX. 2 Hofheim I.).

In early examples of Form 30, *i.e.* those of the Claudian and Neronian periods, the wavy line is frequently found just *above* the ovolo as well as *below* the decorative design (Pl. VII. 5 Hofheim I.; Pl. VIII. 2 MASCLVS, 3; Pl. IX. 2 Hofheim I., 4 MASCLVS). Its persistence into the Flavian period in one or both of these situations is illustrated in the bowl by GERMANVS (Pl. IX. 6) and in that from Newstead I. (Pl. VII. 2). In the Flavian period it is, however, usually absent from the position above the ovolo; and at this period it is not uncommon for it to be displaced to a situation *below* the ovolo (Pl. VIII. 4 Rottweil; Pl. IX. 7, 8, 9 PAVLLVS).

In the Flavian period the wavy line is by far the most common mode of demarcation<sup>1</sup> for metope and transitional decoration, and is illustrated by the following examples:

*Nero-Vespasian period*—Form 29: Pl. IV. 3 PASSENVS.

*Flavian period*—Form 29: Pl. IV. 9 MEDDILLVS (coalescent beads).

Form 30: Pl. VIII. 4 Rottweil; Pl. IX. 7, 8, 9, 10 Newstead and Rottweil.

Form 37: Pl. XI. 1 Hofheim II., 8 Newstead I.; Pls. XIV. and XV. (except XIV. 8), examples from Pompeii, Newstead and Margidunum.

In the Sigillata vessels found at Pompeii, and illustrated by Atkinson (*op. cit.*), bead-rows have been replaced by wavy lines in demarcating metope-decoration in Form 29. Similarly, with two exceptions, Atkinson's Nos. 53 (mixed bead-rows and wavy lines) and 72, the wavy line functions as a border for metope and transitional decoration in Form 37.

Oblique wavy lines in series are of common occurrence in the Flavian period, viz. on Form 29 (Pl. IV. 9, 10; Pl. V. 11) and on Form 37 (Pl. XI. 1), occasionally with the appearance of coalescent beads. They are also sometimes found in the work of early East Gaulish potters.

In the Sigillata of the period transitional between the first and second century the wavy line is not uncommon as a delimiting *motif*. In the examples of the Bregenz "Cellar-find" (Domitian-Trajan period), which can be assigned to the reign of Trajan (figured on Pl. XVI.), the wavy line still predominates.

Although especially characteristic of the work of the South Gaulish potter, the wavy line occasionally occurs on decorated vessels by Lezoux potters of the transition period (first to second century), *e.g.* Pl. XII. 2 BVTRIO; Pl. XX. 4 BVTRIO; *Wroxeter Report*, 1912, Fig. 13, p. 39; 1914, Pl. XXVI. 4. It is also not uncommonly met with on the products of the early East Gaulish potters SATTO and the Luxeuil "potter of the helmet and

<sup>1</sup> Amongst the exceptions may be noted: Newstead I. p. 217, 1 (bead-rows and wavy lines), p. 213, 9 (bead-rows); Bushe-Fox,

*Arch.* 64, Fig. 3, Form 29 (bead-row), dividing third zone.



shields" (Walters, *C.R.P.* M 1274, Fölzer, Pl. I. 7), and is even found on bowls of the later potter TRIBVNVS of Lavoye (Pl. XVII. 5).

Occasionally, in Sigillata of the early second century, the wavy line is found side by side with bead-rows, as in the St. Andrew's Cross ornament of a Form 37 from Silchester (May, *Silchester*, Pl. XX. A), and in the same ornament of the potter DIVIXTVS (Pl. VIII. 7; Walters, *C.R.P.* M 1038).

Generally speaking, however, it is not common in second-century work, where its place is usually usurped by the bead-row or other *motif*. Thus in the Antonine period at Newstead the bead-row (or the astragalus) is the almost universal *motif*; but the wavy line is still met with in three examples at Newstead (Curle, *Newstead*, p. 221, 4-6), and in certain other specimens of the Antonine period at Lezoux (Déchelette, i. Fig. 134; see also his Pl. XII. 1).

The wavy line should not be confounded with the cable-like *motif* not uncommon in East Gaulish Sigillata (Pl. XI. 4; XIII. 2 IANVS).

With rare exceptions (Pl. X. 1 Hofheim I.), no delimiting *motif* (either of bead-rows or wavy lines) separates the ovolo from the decoration in early (Julio-Claudian) examples of Form 30; but with the advent of the Flavian period a wavy line between the ovolo and the decoration is not unusual in Form 30 (Pl. VIII. 4 Rottweil; IX. 7, 8, 9 PAVLLVS, Rottweil). In early (Flavian) examples of Form 37 a wavy line, or less commonly a bead-row, almost universally separates the ovolo from the decorative design (Pl. XI. 1, 2, 6, 8 Hofheim II., Pompeii, Newstead I.; Pl. XIV. 1-7; Pl. XV. 1-6). It is indeed quite exceptional (Pl. XI. 7 GERMANVS) even in this period to find no such delimitation by a wavy line.

In typically second-century work the place of the wavy line (in its function of separating the ovolo from the decorative design) is usually taken by a bead-row or other *motif*, but in East Gaulish ware this line of separation is frequently absent (Pl. XIII. 1, 4-7).

(c) The *Astragalus* (bead and reel) *motif* is an ancient one, occurring in Egyptian art of the XVIII. Dynasty, and is frequently found in Greek and Roman architecture (*e.g.* Erechtheum, Ara Pacis Augustæ). In ceramics it is found as a limiting border, either above or below the decoration. In Augustan Sigillata it is represented on a crater found at Haltern (Loeschcke, Pl. XVII. 1 A), and is also found on the short-lived Gaulish crater, Form 11, at Hofheim (Pl. XXI. 1).

As a bordering-*motif* it is, however, rare in South Gaulish Sigillata, although its elements appear in the astragal type of tendril-binding and on the upper edge of festoons, *e.g.* as early as the Claudian period, as on a bowl, Form 29, by CARVS (Knorr, *Terra Sigillata*, 1919, Pl. 20).

As an upper or lower border to the design, it is sometimes met with in the work of Lezoux potters, such as CENSORINVS and COBNERTVS (Pl. X. 6), and of East Gaulish potters, such as DEXTER and CENSOR (Pl. XVIII. 3, 2). A good example from Margidunum is illustrated on Pl. XIV. 8.

Astragals scattered in the field are not uncommon in second-century ware, both of Lezoux and East Gaul (Pl. X. 6; Pl. XVII. 1, 2).

(d) A *cabie* border is a *motif* especially characteristic of East Gaulish ware (Pl. XI. 4; Pl. XII. 6 REGINVS; Pl. XIII. 2 IANVS).

(e) A *rouletted* dividing-*motif* is occasionally met with below the ovolo, as on a Form 37 by COBNERTVS found at Corbridge (*Arch. Æl.* 3rd ser. viii. Fig. 13).

### (C) SCROLLS AND WREATHS.

#### PL. XXXI.

Scroll-decoration is found on pottery at a period far anterior to the era of provincial decorated Sigillata. Whilst it is occasionally met with in Mycenæan ware (Fig. 1) and in early Boeotian vessels (Fig. 2), it can be traced throughout the whole of the painted pottery of Greece down to the late painted pottery of Italy (Figs. 3, 4, 9). On the Hellenistic Hadra vases of Alexandria an ivy-scroll with bifid tendril-binding (Fig. 6), very similar to that on South Gaulish Sigillata, is found on an example which can be dated to the year 264 B.C.

In stone the acanthus-scroll occurs on the Erechtheum (Fig. 7), and remarkable naturalism is evident in a vine-scroll on the Hellenistic "Alexander" sarcophagus (Fig. 11). On the other hand, in a fresco of an early Capuan (Samnite) tomb we find a continuous scroll much conventionalised (Fig. 10). At Pompeii, scroll-work, carved in stone or moulded in stucco, is not uncommon; and the two examples (Figs. 12 and 13) are illustrated because of their close affinity in certain details to the early types of scroll found on South Gaulish Sigillata.

On metal work we find the ivy-scroll on Græco-Etruscan mirrors (Fig. 5), and the acanthus-scroll is present on a Hellenistic plaque of beaten gold from South Russia (Fig. 8), with a bifid-binding and beading.

Although scrolls (especially of ivy) occur to a limited extent on Greek vases of the Apulian and Campanian types (Figs. 3, 4), the immediate prototypes of the South Gaulish scroll are to be found in Italian Sigillata (Fig. 14 ATEIVS and XANTHVS; Fig. 15, Fig. 16 PERENNIVS and TIGRANVS; Pl. XXIV. 4 SATVRNIVS, and 9), and in Augustan metal work (Fig. 17).

Many varieties of the continuous foliated-scroll occur in provincial decorated Sigillata, and it is only possible to give a brief outline of the general trend of development. Certain points of detail are, however, particularly characteristic of definite periods, and therefore possess considerable chronological value.

(1) *The scroll with sessile leaves.* The stem of the scroll is devoid of branches or tendrils, and the leaves are sessile, *i.e.* without stalks and attached

directly to the parent stem. This type is especially characteristic of the Tiberian and early Claudian periods. The leaves are usually ranged in symmetrical, bilateral pairs, as in the *BILICATVS* bowl (Fig. 18) and Pl. XXIX. 1, 5, or else they may be placed somewhat more irregularly, as in an acanthus-scroll on the "mermaid" bowl (Fig. 19). A typical acanthus-scroll (recalling a design on the *Ara Pacis Augustæ*) occurred on a Form 30 at Margidunum (Fig. 20).

The *ACVTVS* bowl from Pleshey (Pl. XXVI. 6) furnishes another instance of this class of scroll. At Silchester it occurs on the *VITLVS* bowl (Pl. XXVI. 3) and other early examples of Form 29 (Pl. XXVIII. 3). It is also represented at Colchester (Joslin Coll. A 5) and on an early Claudian bowl at London (Fig. 47). The sessile scroll is found in the Tiberian-Early Claudian period at Aislingen (Knorr, *Aislingen*, Pl. I. 3, III. 11, IV. 9), but the type is not illustrated in Ritterling's "*Hofheim*," and does not occur on pottery datable to the Flavian period.

(2) The *simple stalked-scroll*, in which a single leaf-stalk diverges from the parent-stem in simple alternation above and below, bearing only a single leaf or bud. This type occurs on a Tiberian bowl at Strasbourg (Fig. 22), and on Claudian bowls by *GENIALIS* (Fig. 21) and *AMANDVS* at Aislingen (Knorr, *Aislingen*, Pl. VII. 3). It is extremely uncommon in later *Sigillata*, but isolated instances occur even in the middle of the second century (Fig. 37 *CINNAMVS*) and on East Gaulish ware (Knorr, *Rottweil*, 1912, Pl. XXIX. 2).

(3) The *compound stalked-scroll*, occurring in two modifications, viz. :

(a) The leaf-stalk arises singly from the parent-stem, but very soon bifurcates into two branches terminating in leaves, buds or other plant-ornaments. This is an early type, and may be referred mainly to the Tiberius-Claudius period. It occurs on the upper frieze of a Tiberian bowl at Strasbourg (Fig. 23) and in the bowl by *MELVS*, a Claudian potter (Fig. 24); and it is characteristic of the work of the early potters *SENICIO* (Knorr, *Aislingen*, Pl. VI. 1, 2) and *ARDACVS* (Fig. 26). It is also found at Hofheim I., where it is present on a bowl by *LICINVS* (Fig. 25). The examples from Margidunum (Pl. V. 6; XXIX. 8) may be assigned to the Claudio-Neronian period.

All the preceding examples are taken from the upper frieze of Form 29. In this position it is exceptional to find this type of scroll in the Flavian period, and it is, for instance, not represented in this situation either in Atkinson's *Pompeii*, Knorr's *Rottweil*, Curle's *Newstead* or Bushe-Fox's paper (*Arch.* 64). On the lower frieze it is less frequent (Pl. XXVI. 10 Colchester).



A large modification of this type, with long stalks, is, however, occasionally met with on the lower frieze of Form 29 (Fig. 29 CARILLVS).

- (b) Two, three or more stalks diverge separately or from a common stalk (short or long), branching alternately above and below from the parent-stem. Quite early in the Claudian period, and even in Tiberio-Claudian times, as in the upper frieze of a vessel (Form 29) of Italic technique at Colchester (Pl. XXVI. 10), the parent-stem gives off two or more stalks terminating in a leaf or other plant-form. This evidence of the *horror vacui* or want of artistic restraint is a constant characteristic of provincial decorated Sigillata from the Claudian period onward.

This type is found in the work of the Claudian potter AQTIVANVS (Fig. 27) and of the early potter MODESTVS (Fig. 30). Its elements are also present on the lower frieze of Form 29, as in a bowl of the Tiberius-Claudius potter CATLVS (Fig. 28). The lower frieze of a bowl by SENICIO (Fig. 31) is especially interesting, inasmuch as it shows the compound stalked-scroll terminating in two large leaves and a bud<sup>1</sup>—a Claudian prototype of a common Flavian characteristic, in which, however, it is more usual for the small leaf or bud to be situated centrally, as on an example from Pompeii (Fig. 33).

The compound stalked-scroll, Type *b*, is the almost universal scroll-motif in the Flavian period, and occurs plentifully on Form 29 and early examples of Form 37. With one or two exceptions, it is the only type illustrated in Atkinson's *Pompeii*, Curle's *Newstead* and Bushe-Fox's paper (*Arch.* 64). The illustrations (Figs. 34-36) taken from Atkinson's *Pompeii* are characteristic of this period.

The compound stalked-scroll, Type *b*, is well illustrated in the work of the Domitian-Trajan potter MERCATOR (Pl. XX. 1) and in that of the early East Gaulish potter SATTO (Fig. 46). It continued to be produced in the Antonine period (Pl. XII. 3 CINNAMVS).

In the Claudio-Neronian period this type of scroll is common on Form 30, e.g. Pl. VII. 1 Hofheim I.; Pl. VII. 6 Strasbourg; Fig. 38 Bedfordshire. In the Flavian period it occurs in conjunction with figure-ornament, as at Rottweil (Fig. 39) and at York (May, *York*, Pl. I. 9). An intermediate type from Margidunum is illustrated on Pl. IX. 5.

<sup>1</sup> This type with three plant-terminals occurs also on a Form 29 by VOLVS at Colchester (Fig. 32).

(4) The *divergent scroll* is a well-marked variety of the compound stalked-scroll in which the stalks diverge in different directions or approximately at right angles from a common focus.

It is chiefly characteristic of the reigns of Claudius and Nero (Fig. 41 BASSVS COELVS ; Fig. 40 Hofheim), but is still occasionally found in Flavian work (Fig. 44 SEVERVS).

It occurs rarely in the scroll-decoration of Flavian examples of Form 37 (May, *Carlisle*, 24), and is not figured on any of the Flavian vessels illustrated by Atkinson (*Pompeii*), Curle (*Newstead*) or Bushe-Fox (*Arch.* 64).

All the above described scrolls are derived from nature, some of the earlier examples (Figs. 22, 23) being highly naturalistic, whilst the vast majority may be defined as displaying a more or less conventionalised naturalism.

Attention may now be called to two types of scroll which are geometric rather than natural, viz. :

(5) The *spiral scroll*, illustrating a reversion to an earlier type, possibly under Celtic influence. It may be described as the Vitruvian or wave-scroll.

This scroll is found as early as the Flavian period at Pompeii (Fig. 42). It occurs more especially on East Gaulish ware (Fig. 43, style of IANVS ; Pls. XVII. 2 style of ALBILLVS, XII. 5 "potter of small medallions").

(6) The *cable-scroll* of East Gaulish potters has more affinity to a manufactured article than to a natural object (Fig. 45 IANVS).

*The Winding Wreath.* A winding wreath of pinnate leaves occurs even on Minoan vases, and is present on early specimens of Forms 29 (Knorr, *Aislingen*, Pl. V. 1 GALLICANVS) and 30 (Pl. VIII. 2 MASCLVS). It is not uncommon on cylindrical bowls of the Nero-Flavian period (Pl. IX. 5, 6 GERMANVS ; and Fig. 39). It has already been described in the chapter dealing with Form 30.

*Broad Straight Wreaths* have already been noted as occurring on the upper frieze of Form 29, more especially in the Julio-Claudian period (Pl. III. 5 SENICIO, 6 SCOTTIVS) and sporadically in the Flavian period (Pl. V. 4 VITALIS). Occasionally this type of wreath is found in the lower frieze of Form 29, and quite rarely in its true *broad* form on vessels of Form 37 in the Flavian period (Atkinson, *Pompeii*, Fig. 68). It is particularly characteristic of early South Gaulish work, but occurs also in the earliest period of Lezoux (Déch., i. Fig. 102).

The prototypes of the *Broad Wreath* are to be found in Augustan metal work (Pl. XXII. 6), Italian Sigillata (Pl. XXIV. 5), Cales ware and Apulian vases (Rayet and Collignon, *Hist. de la céramique grecque*, Fig. 114).

*The Narrow Straight Wreath.* The chronology of this wreath has already been noticed in the descriptions of Forms 29 and 37. It is more particularly characteristic of South Gaulish and early Lezoux work, but it occurs occa-

sionally in the products of Lezoux potters working at the "turn" of the first and second century (Pl. XX. 4 BVTRIO). In South Gaulish pottery of the Flavian period it is a very common feature, and was not infrequent in the latest products of South Gaul, viz. of the reign of Trajan (Bregenz "Cellar Find," Pl. XVI. 2-4).

It is still met with relatively frequently in all the East Gaulish potteries (Pl. XVII. 1 Luxeuil; Pl. XVII. 8 Trèves; Pl. XVIII. 1; see also Oelmann, *Niederbieber*, Pl. VII. 8, 13, 16, 26, 28, 29).

#### (D) TENDRIL-BINDINGS.

(For illustrations of Type-Forms, see Pl. XXXII.)

In the decorated Sigillata of the first century some form of union or binding usually masks the junction (or nodal point) of lateral stalks or tendrils with the main stem in wreath and scroll ornament.<sup>1</sup>

Although the term "tendrill-binding" is not, strictly speaking, an exact botanical definition of the means used in masking the actual junction of two stalks, yet it is convenient to employ this term in describing this special *motif* of decorative designs in Terra Sigillata.

Tendrill-binding is an almost invariable feature of the work of the Julio-Claudian period, and is also generally present throughout the Flavian age. But in the latter period, even as early as the reign of Vespasian, it may be absent or very imperfectly executed (Atkinson, *Pompeii*, Fig. 49). In the reign of Domitian its absence becomes more frequent, and the point of divergence of a branch from the main stem may be only indicated by a slight swelling (Pl. XIV. 1 Newstead I.; XIV. 4; XV. 2).

Tendrill-binding is almost always absent from the work of typically second-century potters (see Pl. XII. 3 CINNAMVS). It is, however, not uncommon in the decorated fabric of potters of the transitional period, *i.e.* the "turn" of the first and second centuries, and is found more particularly in the early products of the East Gaulish potteries. The *motif* here persists either as an ornamental detail, quite independent of any offshoots from the main stem (Pl. XII. 5 "Potter of the small medallions"), or as a true wreath-binding (Pls. XIII. 2 and XXXI. 45 IANVS).<sup>2</sup> The continuance of this *motif* in early East Gaulish ware is an additional instance of the influence of the South Gaulish potters in this area.

1. The *Bead-ring* or *annular tendrill-binding*. An early Tiberio-Claudian feature is the occurrence of one or more beads or bead-rings placed at the

<sup>1</sup> The elements of tendrill-binding occur as early as the period of the painted pottery of Greece (Rayet et Collignon, *La Céramique Grecque*, Fig. 83), and in the Hadra vases of Alexandria, middle of the third century B.C. (Fig. 1).

<sup>2</sup> See also the following East Gaulish examples: Knorr, *Cannstatt*, ii. 3 SATTO, bead and reel *motif*; xxii. 12, repeated bead-*motif* on stem and independent of offshoots.



junction of a pair of sessile, pinnate leaves on a symmetrical scroll (Fig. 2 BILICATVS) or on a straight wreath (Fig. 3 SENICIO). It may be noted that the bead-ring is found in Puteolan fabric (Pl. XXIV. 10). In the Claudian period at Hofheim it is found in connection with the straight wreath (Fig. 4). The prototype of this *motif* is found on the Erechtheum (Pl. XXXI. 7).

2. *Bifid (or pinnate) tendril-binding* is especially characteristic of the work of the Julio-Claudian potters, and in its true form is an essentially pre-Flavian feature. It occurs on an early sepulchral vase from Alexandria (Fig. 1). The following are the chief types:

- (a) A *repeated series* of bifid bindings occasionally mark the site of lateral stalks in early Sigillata, as in the Tiberian bowl at Strasbourg (Fig. 5).
- (b) *Bifid binding with one or more beads* is frequently met with in Sigillata of the reigns of Tiberius and Claudius. It is also found, though less commonly, in bowls of the Neronian period. Its origin may be traced to the annular moulding and divided acanthus leaf which sometimes embrace the stem of naturalistic ornament in Italian Sigillata (Figs. 6 and 7). A similar arrangement is displayed on the frieze of the *Ara Pacis Augustae* (Fig. 8) and in a close imitation of this frieze on a Sigillata bowl in the style of the early Lezoux potter ATEPOMARVS (Fig. 10).<sup>1</sup> In the ATEIVS crater from Mainz (Fig. 11), and in the South Gaulish crater from Neuss (Fig. 12), bifid tendril-binding is used on a continuous scroll. Typical examples of this *motif* are also illustrated on a Tiberian bowl (Fig. 13, base of the Nautilus ornament), a Claudian vessel by AQVITANVS (Fig. 19), and a bowl by LICINVS (Fig. 17). It is characteristic of the work of the Julio-Claudian potters VOLVS (Fig. 14), SENICIO (Fig. 15) and ARDACVS (Fig. 16), whilst it is a well-marked feature in the scroll-decoration of Form 30 in the Claudian period at Hofheim.<sup>2</sup> (Pl. VII. 1). It is also present in closely contemporary examples of this form from Vienna, Bedfordshire and Strasbourg (Pl. VIII. 2 MASCLVS, VIII. 3 and VII. 6; see also Pl. XXXI. 38).

In its distinctive form it is almost wholly confined to sites which date back to the pre-Flavian period, such as London, Colchester, Silchester, Wroxeter, Hofheim and

<sup>1</sup> Cf. also the Tomb of the Garlands, Pompeii, Fig. 9.

<sup>2</sup> Other examples from the Claudian occupation of Hofheim are illustrated by Ritterling, *e.g.* on Form 29 (his Pl. XXIV. 6, 8, 9 MODESTVS; Pl. XXV. 3 A, 3 B, 7 B) and on Form 30 (Pl. XXVI. 13, 14 B, 16, 17, 19). At

Colchester the scroll-decoration of early fragments of Form 30 also displays bifid tendril-binding. It is also the typical binding in the scroll-decoration of the Tiberio-Claudian craters (Form 11) recently found at Bregenz (Knorr, *Terra Sigillata*, 1919. Pls. 2 D, E; 3 M, N, O).

Aislingen. Sporadically it is, however, found also on sites which were first occupied in Flavian times or on pottery of this period. Here, however, the *motif* occurs with or without an imperfectly formed bead, as at Rottweil (Knorr, *Rottweil*, 1912, Pls. IV. 7, V. 17, VIII. 3), Pompeii (Fig. 21 MOMMO) and Vindonissa (Fig. 22 MATVGENVS). The almost complete absence of this form of tendril-binding from Flavian bowls of Form 37 is a point of considerable chronological significance.

3. *Double bifid tendril-binding* is also an early *motif*, and occurs on the work of the Julio-Claudian potters CATLVS (Fig. 23) and SENICIO (Fig. 24). Other pre-Flavian examples occur at Aislingen (Knorr, *Aislingen*, Pl. III. 13, 14) and at London (Fig. 25) on a Claudian bowl with the Nautilus *motif* in the lower frieze. It should be carefully distinguished from the later and practically Flavian double trifold *motif* (*v. infra*).

4. *Moniliform binding* is met with throughout the period of South Gaulish Sigillata. Three, four, five or even six beads mark the junction of lateral stems with the main stalk of the scroll. Variations in the size, shape or number of the beads do not seem to possess any real chronological significance.

Although somewhat rare in the earliest Sigillata, this mode of binding is frequent in the reigns of Claudius, Nero and Vespasian. It is not uncommon in the reign of Domitian, but by this time its place had been to some extent usurped by other *motifs*, which are specified later on. Its origin may clearly be traced back to Arretine Sigillata (Pl. XXIII. 5).

Attention is drawn to the following examples, many of which are illustrated on our plates:

*Tiberius-Claudius*: Aislingen, Fig. 26, Form 29.

*Claudius*: Aislingen, Fig. 28, Form 29 by ARDACVS, in association with bifid binding. Hofheim I., Fig. 29, Form 29 by MODESTVS; Ritterling, *Hofheim*, Pl. XXVII. 14 A, Form 30. Our Pl. XXV. 2, Form 29 by DARIBITVS.

*Claudius-Nero*: Fig. 27, Form 29 by MELVS; Pls. IV. 4 and XXXI. 25, Form 29 by LICINVS, in association with bifid-binding.

*Nero-Vespasian*: Pl. IV. 5, Form 29 by PRIMVS; Fig. 30, Form 29 by VITALIS.

*Nero-Flavian*: Pl. IV. 6, Form 29 by SEVERVS.

*Vespasian*: Pl. IV. 10, Form 29 from Torre Annunziata.

*Domitian*: Fig. 31, Form 29 from Newstead I.

Moniliform binding is of common occurrence in early examples of Form 37, as in the vessels of the hoard found at Pompeii (Atkinson, *Pompeii*,

p. 36) and in the Domitian period at Newstead (Curle, *Newstead*, p. 205, 12 and 15). The following examples are figured on our plates :

*Vespasian period* : Fig. 32 from Hofheim II. and Pl. XIV. 7 from Pompeii.

5. The *astragalus* (*bead and reel*) tendril-binding, consisting of an elliptical or barrel-shaped central element with one or two beads at each end, is found on Sigillata dating from the Tiberio-Claudian period <sup>1</sup> to the reign of Domitian. It is rarely found at the nodal point of a divergent scroll (Knorr, *Terra Sigillata*, 1919, text fig. 21).

It is exemplified by the following specimens :

*Tiberius* : Form 29 by MACCARVS ("MCA") (Knorr, *ibid*, Pl. 50 F).

*Claudius* : Fig. 34, Form 29 by GALLICANVS ; Fig. 35, Form 30 by MASCLVS, in association with bifid binding.

*Vespasian* : Form 37 from Pompeii (Pl. XI. 6 and Fig. 36 ; see also Pl. XXXI. 33, 35).

*Flavian* : Fig. 37, Form 29 by CRESTVS from Carlisle.

This *motif* is sometimes met with in the early part of the second century, as in the bowl by SATTO already referred to. At this period it is, however, more commonly employed as an upper or lower border to the general design, replacing the usual bead-row (Pl. XIV. 8 on Form 37 and Pl. X. 6 COBNERTVS on Form 30). This bordering *motif* was employed by CENSORINVS of Lezoux, and by the Trèves potters CENSOR (Pl. XVIII. 2) and DEXTER (Pl. XVIII. 3). In second-century work it is also found frequently isolated in the field (Pl. X. 6) and quite independent of wreath or scroll.

6. The *double trifold tendril-binding* consists typically of two compressed central beads or rings furnished with trifold terminals, as in a bowl by MERCATOR from Silchester (Pl. XX. 1). It is highly characteristic of Flavian work, more especially in Domitian's reign, and was much used by the potters L. COSIVS VIRILIS and MERCATOR, whose chief activity may be assigned to this period. This binding does not occur at Hofheim either in the Claudian or the Vespasianic period, and it is not figured in Atkinson's illustrations of decorated Sigillata from Pompeii.

Yet it is present on a Flavian bowl, Form 29, by PRIMVS from Vindonissa (Fig. 39), and it is common on Flavian Sigillata found at Rottweil (*e.g.* Knorr, *Rottweil*, 1912, Pls. IV. 1, 5 ; VI. 7 ; VII. 1, 2 ; VIII. 9, all on Form 29 ; XXI. 1, 2, 3, 7 on Form 37. See also Fig. 40, Form 37 by MERCATOR). It is also recorded at Rottenburg (Knorr, *Rottenburg*, Pl. I. 3 on Form 29) and at Cannstatt (Fig. 47 on Form 78).

A *motif* intermediate between the typical double trifold binding and the earlier double bifid binding is represented on the bowl by CARILLVS, Form 29 (Fig. 41), and on the beaker, Form 67, from Aislingen (Fig. 42).

<sup>1</sup> See a Tiberio-Claudian Form 29 (Knorr, *Terra Sigillata*, 1919, Pl. 7 H).



7. *Rosette tendril-binding* is chiefly found in the Claudius-Nero period, but is occasionally met with in the later products of South Gaul. It occurs in the following situations :

- (a) Rarely on the usual type of continuous scroll, as on a Claudian bowl from Aislingen (Fig. 43) and on Form 30 in the same period at Hofheim (Fig. 44).
- (b) Occasionally on the straight wreath of Form 29 in the Claudian period (Fig. 46) and also on a bowl by VITALIS, Form 29, from Pompeii (Atkinson, *Pompeii*, Fig. 26).
- (c) More commonly upon the nodal points of a divergent scroll in examples of Form 29 of the Claudius-Nero period, as at Hofheim I. (Pls. VI. 6 and XXXI. 40 ; see also Fig. 48), London (Fig. 49 BASSVS COELVS). In the Flavian period the nodal points in the divergent scroll are more commonly marked by moniliform binding (Fig. 50 SEVERVS).
- (d) At the point where a tendril diverges from a garland which is not uncommonly found on the lower frieze of Form 29, and also on Form 30 the nodal point is frequently marked by a rosette. Examples of this technique occur at London (Walters, *C.R.P.*, M 1002), Hofheim I. (Fig. 51) and Vindonissa (Knorr, *Aislingen*, Pl. XVII. 1).

The rosette tendril-binding does not appear to be common in the Flavian period ; one doubtful example occurs at Rottweil (Fig. 52), and it is only represented in a bowl of early type by VITALIS at Pompeii (Fig. 53). In a meaningless position it is occasionally found on East Gaulish ware (Knorr, *Cannstatt*, Pl. XL. 8).

The rosette corner-binding of metope-decoration is excluded from this notice.

- (e) A *cross* may take the place of a rosette in late examples of Form 37, as at Cannstatt (Fig. 54).

## CHAPTER VIII

### PLAIN FORMS

(Nos 1-32)

#### No. 1.—*RITTERLING TYPE 5*. PL. XXXVIII.

Cup with conical wall and vertical, fluted rim.

THIS form is an imitation of the Augustan cup Loeschke Type 8 Ab. (Fig. 1).

The straight wall rises obliquely from the base and joins the vertical or slightly oblique rim at an obtuse angle.

This junction is marked externally by a pronounced ridge.

The foot-stand is high and approaches a triangular profile in section. Not infrequently it carries, as in its Arretine prototype, a groove which encircles the exterior of the foot (Fig. 3).

The absence of rouletting on the rim and the external ridge, together with the omission of the small ledge near the junction of the wall with the basal interior, distinguishes the Gaulish vessel from its Italian forerunner.

Occasionally a minute groove about the middle third of the interior (Fig. 2) denotes the persistence of Augustan influence.

This type appears as a not infrequent product of the earliest South Gaulish potters, and was practically confined to the Tiberio-Claudian period. In the Tiberian grave-group (Trèves 624) it is found in association with the cup, Drag. 24/25, and is also represented in a degenerate form in a grave-group of the Claudius-Nero period (Trèves 42).

In the pre-Flavian *Moorschicht* at Wiesbaden the remains of this cup are not infrequent; it has also been found at Sels, Aislingen and rarely at Hofheim I. (40-51 A.D.).

In Britain this form is rare.

Potters' stamps of ACIVS, PAVLLVS, SCOTNVS, SCOTTIVS.

*No. 2.—RITTERLING TYPE 9. PL. XXXIX.*

Small bowl or cup with angular wall, the upper portion of which is cylindrical and the lower part conical.

This cup is derived from the Augustan type Loeschcke 15 (Figs. 1 and 2), from which it is more particularly to be distinguished by the absence of rouletting from the lip and central ridge.

It is closely related to Dragendorff's Arretine Form 8 (Fig. 13).

The upper vertical or nearly vertical portion of the wall deviates from the lower oblique and conical part at an obtuse angle, and the junction is marked externally by a projecting ridge which in some examples takes the form of a definite moulding (Figs. 7-10).

Above this ridge is a horizontal groove; below it there is usually a distinct hollowing-out or fluting of the oblique portion of the wall, as in the bowls of ROGATVS (Fig. 7) and MACCARVS (Fig. 12).

The cylindrical upper portion of the wall has, not uncommonly, a slight outward slope, and is frequently interrupted about its middle by a horizontal groove.

The lip, which is sometimes delimited externally by a groove, forms either a half-round moulding (Fig. 7 ROGATVS) or is truncated above, displaying a nearly triangular cross-section (Fig. 10).

The foot-stand has an external angle and approaches a rectangular profile in section.

It passes into the base of the vessel by a low curvature, which is usually interrupted by a "step," as in Form 29 (Figs. 4-6, 8, 9).

The basal exterior thus commonly presents a plastic ring, in the centre of which is a small nipple-like projection. This characteristic is well shown in Figs. 15 and 16 from Hofheim and Margidunum.

The spiral handle of the Augustan prototype is rarely represented in Gaulish fabric.

The interior base usually displays the same pronounced dip or concavity as its Italian forerunner.

Amongst the examples illustrated, the bowl by CASIVS (Fig. 14) most closely resembles Dragendorff's Form 8 (Fig. 13). All the others are obvious derivatives of the Arretine type, as found at Haltern.

The cup, Fig. 3, from Nemi is probably intermediate between the Augustan and South Gaulish forms. It is of Italic technique, and has an illegible stamp "in planta pedis."

This cup, *i.e.* Ritterling Type 9, is found at Sels (*ante* 41 A.D.). At Hofheim it occurs only in the Claudian period, and at Aislingen this form is regarded as an early type.

In Britain these cups have been found on southern sites, such as London and Silchester. Margidunum appears to be the most northerly settlement at which this form has, as yet, been recorded.



It is probable that the manufacture of this cup was not continued down into the Flavian period.<sup>1</sup>

The stamps associated with this vessel are those of potters whose activity was either exclusively pre-Flavian or dates back to pre-Flavian times: AQVITANVS, ARDACVS, CASIVS, DARRA, MACCARVS, MODESTVS, MOMO, NIGER, QVINTANVS, ROGATVS, SECVNDVS.

No. 3.—*DRAGENDORFF FORM 24/25*. Pl. XL.

Hemispherical cup or small bowl with rouletted rim.

This form is a direct imitation of the Arretine cup Loeschcke Type 12 (Fig. 1), which is met with occasionally in Britain, *e.g.* the example by ATEIVS found at London Bridge Station and now in the Bethnal Green Museum (Fig. 2), and another, probably by his slave XANTHVS, in the Colchester Museum (Fig. 14).

The wall is smooth internally and uniformly rounded. Externally it is separated from the rim by a pronounced "half-round" moulding.

The rim is decorated on its exterior surface by vertical or (more often) slightly oblique striation (rouletting), and is typically constricted above by girth-grooves, both internally and externally. A groove is also sometimes present just below the rouletting in imitation of the Arretine cup (Figs. 3, 4, 16, 17).

The spiral handle, so common in the Augustan prototype, is only occasionally present in Gaulish fabric (Fig. 16 ALBINVS).

The foot-stand is usually low and either approximately rectangular in section or approaches the form of a truncated triangle.

Occasionally variants of this type are found, as in the cup by ARDACVS (Fig. 6); here the foot-stand is high and rouletting is absent from the rim. Sometimes the cup possesses a definite lip (Fig. 16), and, rarely, there may be an indication of the little "step" on the basal exterior (Fig. 4), a feature which is clearly marked in some Italian examples (Figs. 1, 14).

This cup is extremely common in the Claudian period at Hofheim, where it vies in frequency with the cup Drag. 27. It occurs at Sels (*ante* 41 A.D.), and is abundant in the earlier occupation at Aislingen, whilst it is rarely met with at Rottweil, and is altogether absent in the Domitian period at Newstead and Cannstatt.

It is found in grave-groups (624, 559) at Trèves, attributable to the reigns of Tiberius, Claudius and Nero, and may be said to be especially characteristic of these reigns. In Britain the true form does not appear to be represented at sites first occupied in the Domitian period.<sup>2</sup> It has, however, been recorded as far north as Leicester, Margidunum and Lincoln.

<sup>1</sup> Note, however, the doubtful examples alluded to under Form 24/25.

<sup>2</sup> A doubtful specimen is noted as having

been found at Castlecary (Bushe-Fox, *Arch.* 64, p. 310). That figured by May, *York*, v. 7, does not belong to this type.

The accompanying illustrations are from examples by the following potters:

Aislingen: BIO, COTTV, PATRICIVS (OF PATRI), SALVETVS.

Mainz: ARDACVS, BIO, AVE.

Silchester: COTVLVS (COTVI·Y[ . . ).

Strasbourg: ALBINVS, SCOTIVS, TERTIVS.

This cup was also made by the potters: ACVTVS, ALBANVS, ALBVS, AQVITANVS, ARDANVS, AVITVS, BASSVS, BASSVS and COELVS, CAIVS, CALVS, CAPITO, CASTVS, CENNATVS, CLIVVS, COCVS, CORIVS, COTTVS, CRESTVS, FELIX, FIRMO, LEPIDVS, LIBERTVS, LICINVS, MANERTVS, MASCLVS, MEMOR, MODESTVS, MOMO, NIGER, PASSENVS, PERRVS, PONTVS, PRIMVS, QVARTVS, RVFVS, SABINVS, SECVNDVS, SENEIO, SENICIO, SENIO, SILVANVS, SILVINVS, SVCCESVS, TVSSO, VAPVSO, VASSILIVS, VIRTVS, VITALIS.

Many of these potters had ceased work before the accession of Vespasian, whilst the majority were already active in pre-Flavian times.

The stamps of the potters LIBERTVS and PONTVS indicate that this form was occasionally produced by potters who may have commenced work as late as the Flavian period.

This cup was occasionally produced in "marbled" technique, *e.g.* MANERTVS and PONTVS (London, Guildhall Museum); see also Walters, *C.R.P.* M 125 and M 2378, and a fragment found at Margidunum.

#### No. 4.—*DRAGENDORFF FORM 16. PL. XLI.*

Plate with oblique, externally fluted wall and everted lip.

This form is probably derived from the Italian platters, Loeschke Types 1 A and 1 B<sup>1</sup> (Figs. 1, 2). The interior is sometimes strongly ribbed (Figs. 3, 4, 5), and not infrequently presents a decided element of the quarter-round moulding (Fig. 5, OFI MACCAR), which is the chief distinguishing feature of Drag. Form 15/17. The marked eversion, in some examples, of the small lip is well shown in Figs. 4 and 5.

The lip is usually delimited internally by a groove or a minute projection (Figs. 3, 4, 5).

The basal interior is generally flat or presents a slight tendency to convexity.

The foot-stand approaches either the triangular or the rectangular in section.

At Hofheim this plate only occurs in the Claudian period.

Occasionally, however, in a more dish-like form, it is found on sites first occupied in the Flavian period, such as York (Fig. 6). Fragments of the true type-form have been found as far north as Margidunum.

<sup>1</sup> Ritterling (*op. cit.* p. 206) traces the descent of this plate to Loeschke's Type 2, but the overhanging lip and sloping wall appear to negative this view.

As compared with the platters 15/17 and 18 about to be described, its incidence is not plentiful.

Potters' stamps :	OF MACCAR, MVRANI	-	-	Sels.
	OFI MACCAR	-	-	Mainz.
	GERMANI F	-	-	London.
	OF ARRI (? APRI)	-	-	York.

No. 5.—*DRAGENDORFF FORM 15/17*. PLS. XLII. XLIII.

Plate with low, externally fluted wall, and a quarter-round moulding at the internal junction of the wall with the base.

This vessel is a direct development of the Arretine form Loeschcke Type 3 B (Figs. 12, 13), and the earlier prototype, Loeschcke 2 A (Figs. 1, 2). It has been alternatively described by good authorities either as Drag. 15 (Knorr) or Drag. 17 (Ritterling).

Inasmuch as it possesses characteristics of both these shapes, as figured by Dragendorff,<sup>1</sup> it has been considered advisable to adopt the joint heading 15/17. In order that the development of this type should be clearly understood, a brief description of Dragendorff's Form 17 and its variants is essential.

In Form 17, *sensu stricto*, the wall is practically vertical, and there is either an absence of the quarter-round moulding, as in Dragendorff's type-figure (Fig. 3) and in the Tiberian example from Aislingen (Fig. 4), or else there is a vertical convexity in the lower and internal half of the wall (Figs. 5-8), foreshadowing, so to speak, the more horizontal quarter-round moulding so characteristic of the later platters.

A slight outward slant of the wall is present in many examples of Form 17, and is, indeed, displayed by the Arretine prototype (Loeschcke Type 2 A, Fig. 1).

The Augustan fragment (Fig. 2), ascribed by Loeschcke to his Type 2 A, already shows the vertical internal convexity of the lower half of the wall delimited above by a series of narrow grooves, and this characteristic is noticeable in the Gaulish fragments from Aislingen (Figs. 5, 6), in the Tiberian platter by BILICATVS (OFIC BILI) from Xanten (Fig. 7), and in a large example by SILVANVS (SILVANI) from Mainz (Fig. 8).

In all these South Gaulish platters an external concavity or fluting, delimited above and below by narrow grooves, corresponds to the internal convexity.

Another internal feature consists of a slight projection or "step" a little below the rim (Figs. 5-8). Its place is, however, sometimes occupied by a groove.

The external fluting and the minute internal "step" are both present in the Arretine prototype (Fig. 2).

<sup>1</sup> *Bonn. Jahrb.* Heft xcvi. and xcvi.



The foot-stand is usually triangular in section, but it may be rectangular, as in the SILVANVS platter (Fig. 8).

There is no actual lip in Form 17, but in a rare and early sub-group, of which examples are figured from Aislingen (Fig. 9) and Mainz (Figs. 10 SALVETVS, 11 BALBVS), the wall is plain and nearly vertical, and is bounded above and below by external mouldings. In these examples, as in Dragendorff's type-form, there is no indication of the internal quarter-round moulding.

The specimen by SALVETVS (Fig. 10) is also peculiar in possessing the sham spiral handles so often met with in Italian prototypes of Ritterling Type 9 (see No. 2), and Dragendorff 24/25 (see No. 3).

In all the examples of our typical Form 15/17, to be subsequently described, the quarter-round moulding is well in evidence and its oblique inclination is well-marked, as in the Augustan prototype at Haltern, Loeschke Type 3 B (Figs. 12, 13), where a well-marked external concavity or hollowing out corresponds to the internal convexity.

Many Claudian examples of this platter also exhibit this external concavity (Figs. 15 from Mainz ARDACVS "OF ARDA," 16 from Strasbourg BASSVS "OF BASSI," and Figs. 18, 20, 21, 24 from Hofheim).

But a tendency soon springs up to thicken the angle (and thereby to strengthen the platter) by bevelling the exterior at this point so that it becomes plano-convex in section, *e.g.* in Ritterling's Type 4 A, 4 B (Figs. 14, 19, 22, 25), at Hofheim, and in specimens from Aislingen (Figs. 17, 23, 26-29); on the other hand, the external concavity may be present at a later date, as in the Flavian examples by VITALIS and IVLLINVS from Mainz (Figs. 36, 37), whilst it is markedly in evidence in the dish-like variant by the Domitian-Trajan potter BIRACILLVS (Fig. 41). As in Dragendorff Form 17, the foot-stand is usually triangular in section, but examples with a rectangular foot are not uncommon (Ritterling Type 4 B, Fig. 19, at Hofheim I.; Fig. 17, a Tiberio-Claudian example from Aislingen; Fig. 34 PRIMVS).

The small internal projection situated just below the rim becomes a constant feature. It is usually set at a somewhat higher level than the upper external groove.

Generally, this small projecting ridge is situated in closer proximity to the brim of the vessel in the earlier than in the later platters (*cf.* Figs. 14-28, 30, 31 with 29, 33-41). The upper limit of the quarter-round moulding is marked externally by a half-round moulding at the angle of the platter, and between this and the rim (rarely thickened into a lip, as in Fig. 21 from Hofheim and Fig. 31 DARRA F<sup>1</sup> from Mainz) there is a concavity or fluting of varying degree, delimited above and below by narrow grooves, just as in the Arretine prototype, Loeschke 3 B (Fig. 12). The basal interior is

<sup>1</sup> This vessel exhibits a near relationship to Form 16 (see Pl. XLI. Fig. 5), a type which probably played some part in the development of 15/17.

generally horizontal, but it may present, even in Claudian examples, a distinct upward slant towards the centre, as in the plate by AQVITANVS (Fig. 30) from Colchester.

This characteristic becomes still more pronounced in the somewhat later examples by the potters PRIMVS and VITALIS (Figs. 33, 34, 36), and culminates in the Domitian-Trajan plate at Wiesbaden Kastell (Fig. 40). An interesting proof of the continuous evolution of this plate is to be seen in the Trèves Grave-Groups 491, 504 (Augustan), 488, 475, 503, 710 (Augusto-Tiberian), and 42, 797 (Claudio-Neronian). The more pronounced obliquity of the quarter-round moulding as well as that of the wall, in the Gaulish examples, is well brought out by a study of these grave-groups.

In this plate, just as in Form 18, the obliquity of the wall increases with the passage of time.

In the Italian prototype (Figs. 12, 13) the wall is almost vertical, whilst in early examples from Hofheim I. (Fig. 14) and Aislingen (Figs. 23, 26, 27), and in the vessel by the Claudian potter ARDACVS (Fig. 15), there is only a slight obliquity.

In the Flavian period the outward inclination of the wall, as well as its depth, has become still more marked, as at Newstead I. (Fig. 38), and increasingly so in the Domitian-Trajan examples from Wiesbaden (Fig. 40) and Wroxeter (Fig. 41).

These changes become so pronounced in the latest examples of this form that the vessel ceases to be a platter and becomes converted into a more or less high-walled dish, as in Figs. 37 IVLLINVS, 39, 40, and particularly so in the specimen by the Domitian-Trajan potter BIRACILLVS (Fig. 41).

This type, amongst all the plain Gaulish forms, furnishes perhaps the best example of a consistent and continuous evolution from an Augustan prototype. It is therefore of great importance from a chronological point of view, particularly since it is practically confined to the first century.

In the Claudian period at Hofheim it is almost as plentiful as Form 18, and indeed, as a type, it is probably earlier in its origin.

In the Vespasian period at Hofheim its relative frequency has diminished, and it becomes still less frequent, in comparison with Form 18, in the Domitian period at Newstead and Cannstatt.

In its true form as a platter, it is probable that this vessel ceased to be manufactured subsequently to the Flavian period.

As a dish-like variant, however, it occasionally occurs (as already mentioned) in the Domitian-Trajan period (Fig. 41).

Vestigial remnants of this type, such as the quarter-round moulding, etc., are occasionally found in high-sided dishes, approximately of Form 31, and obviously of second-century manufacture, as *e.g.* in the Corbridge example (Fig. 43), and in a similar specimen by the potter DOVECCVS from the Antonine period at Rough Castle, as well as a fragment found at Leicester. They should not be confounded with the true form,

This plate was occasionally produced in " marbled " technique :

Walters, *op. cit.* M 126 OF]IIA[R]DA/ = OFIC ARDANI ; Trèves Museum,  
BOLLVS FIC.

In order to emphasise the dates at which this platter was produced, the following list of potters who made this form has been compiled. The period of each potter's greatest activity is inserted after the site of his pottery, and the datable sites upon which his wares have been found are also enumerated. In only a few examples has it been found impossible to fix the period of the potter's activity by these means.

Explanation of abbreviations, etc. :

Whenever there is sufficient evidence that two or more potters worked under the same name, the fact is indicated by the prefix (i), etc.

Sels	= tile-works <i>ante</i> 41 A.D.
Wiesb. OL	= the pre-Flavian stratum at Wiesbaden.
Novaes. LF	= the pre-Flavian legionary fortress at Novæsium.
Hofheim I.	= the Claudian occupation of the earth-fort.
Hofheim II.	= the Vespasian occupation of the earth-fort.
Xanten Cl-N	= the Claudio-Neronian legionary fortress.
Aislingen	= late Tiberius-Domitian.
Newstead I.	= the Domitian occupation.
Saalburg I.	= the Flavian period.
G.H.	= Guildhall Museum, London.
B.M.	= British Museum, London.
M.S.	= Marbled Sigillata.

POTTER.	PLACE AND TIME OF POTTERY.	LOCALITIES WHERE HIS WORK HAS BEEN FOUND.
ALBANVS	South Gaul, Claudius-Flavian	Sels, Carlisle, Rottweil, London G.H.
ALBVS	La Graufesenque, Claudius-Nero	Sels, Wiesb. OL, Colchester.
AQVITANVS	La Graufesenque, pre-Flavian	Sels, Wiesb. OL, Novæsium LF, Hofheim I, Colchester, London.
ARDACVS	La Graufesenque, pre-Flavian	Sels, Wiesb. OL, Novæs. LF, Hofheim I, London, Silchester M.S.
ARDANVS	La Graufesenque, Claudian	Xanten Cl-N, Arles M.S.
BALBVS	La Graufesenque, pre-Flavian	Sels, Wiesb. OL, Hofheim I.



POTTER.	PLACE AND TIME OF POTTERY.	LOCALITIES WHERE HIS WORK HAS BEEN FOUND.
(i) BASSVS	La Graufesenque, chiefly pre-Flavian	Sels, Wiesb. OL, Novæs. LF, Hofheim I, Colchester, London.
BILICATVS	La Graufesenque, pre-Flavian	Sels, Xanten early occupa- tion, Wiesb. OL, Hofheim I, London.
BIRACILLVS	Banassac, Domitian- Trajan	Rottenburg, Cannstatt.
BOLLVS	South Gaul, Nero- Flavian	Pompeii, Trèves M.S., Hof- heim, Saalburg I.
CALVVS	La Graufesenque, Claudio-Flavian	Sels, Wiesb. OL, Novæs. LF, Hofheim II, Rottweil, Carlisle, Camelon, Cor- bridge.
(i) CASTVS	La Graufesenque, Claudius-Nero	Cagliari M.S., Faversham.
CELADVS	South Gaul, Claudius- Vespasian	Aislingen, London G.H.
CELSVS	? Lezoux, Nero- Flavian	Aislingen, Colchester, Hof- heim (L. C. CELSVS).
COCVS	South Gaul, Clau- dius-Nero	St. Germain, London.
CRESTVS	La Graufesenque, Claudio-Flavian	Sels, Wiesb. OL, Novæs. LF, Hofheim I, Carlisle, Rott- weil, Corbridge.
DAMONVS	La Graufesenque, Claudian	Sels, London B.M.
DARRA	South Gaul, pre- Flavian	Sels, Novæs. LF, Hofheim I.
FELIX	La Graufesenque and Montans, Clau- dius-Vespasian	Sels, Wiesb. OL, Novæs. LF, Hofheim I, Xanten Cl-N, Colchester, London, Mar- gidunum.
FLAVVS and GERMANVS	South Gaul, Flavian	Friedberg (Flavian occupa- tion).
GERMANVS	La Graufesenque, Nero-Flavian	Wiesb. OL, Novæs. LF, Hof- heim, Pompeii, Rottweil, Carlisle.

POTTER.	PLACE AND TIME OF POTTERY.	LOCALITIES WHERE HIS WORK HAS BEEN FOUND.
INGENVVS	La Graufesenque, chiefly pre-Flavian	Sels, Wiesb. OL, Novæs. LF, Hofheim I, Aislingen, Xanten Cl-N, London, Rottweil.
(i) IVCVNDVS	La Graufesenque, Claudio-Flavian	Sels, Wiesb. OL, Novæs. LF, Hofheim II, Rottweil, Newstead I.
(i) IVLLINVS	La Graufesenque and Lezoux, Domitian- Trajan	Newstead I, Carlisle, Rotten- burg, Wroxeter.
IVLIVS	La Graufesenque, Flavian	Newstead I, London G.H.
LABIO	La Graufesenque, pre-Flavian	Sels, Wiesb. OL, Novæs. LF, Hofheim I, London, Ches- ter.
LEGITIMVS	La Graufesenque, Claudio-Flavian	Hofheim.
LENTVLVS	South Gaul, Nero- Flavian	Novæs. LF, Hofheim II.
LVCCEIVS	La Graufesenque, Nero-Vespasian	London G.H.
MACCARVS	La Graufesenque, pre-Flavian	Sels, Wiesb. OL, Novæs LF, Hofheim I, Xanten Cl-N, Southwark, Silches- ter.
MARVS	South Gaul, Flavian	London B.M., Silchester.
(i) MARTIALIS	La Graufesenque, Flavian-Trajan	London G.H., Corbridge, Kastell Wiesbaden.
MASCLVS or MASCVLVS	La Graufesenque, Claudio-Flavian	Sels, Wiesb. OL, Novæs. LF, Hofheim I, London, Col- chester, Newstead I.
MATVGENVS	Montans, Nero-Ves- pasian	Wiesb. OL, Novæs. LF, Hof- heim, London, Leicester.
(i) MODESTVS	La Graufesenque, chiefly pre-Fla- vian	Sels, Wiesb. OL, Novæs. LF, Hofheim I, London, Col- chester, Leicester, Wrox- eter.
MOMO	La Graufesenque, Claudio-Flavian	Sels, Wiesb. OL, Novæs. LF, Hofheim, Pompeii, Lon- don, Carlisle.

POTTER.	PLACE AND TIME OF POTTERY	LOCALITIES WHERE HIS WORK HAS BEEN FOUND.
(i) MONTANVS	La Graufesenque, Nero-Flavian	Sels, Wiesb. OL, Novæs. LF, Hofheim, Rottweil, Carlisle, Corbridge.
MVRRANVS	La Graufesenque, chiefly pre-Flavian	Sels, Wiesb. OL, Novæs. LF, Hofheim I, London, Rottweil, Corbridge.
NIGER	Banassac, Claudius-Vespasian	Sels, Wiesb. OL, Novæs. LF, Hofheim, London, York.
NIGER ANDECAVIVS	South Gaul, Claudius-Vespasian	Hofheim, London.
NOTVS	La Graufesenque, Claudio-Flavian	Colchester.
PASSENVS	La Graufesenque, Nero-Flavian	Wiesb. OL, Novæs. LF, Hofheim, Leicester, Carlisle, Rottweil.
PASTOR et CE.		Bonn, St. Germain.
(i) PATRICIVS	La Graufesenque, Nero-Flavian	Sels, Wiesb. OL, Novæs. LF, Hofheim II, Pompeii, Rottweil, Carlisle.
PONTVS	La Graufesenque, Flavian	Rome, London M.S., Colchester, Carlisle, Corbridge
(i) PRIMVS	La Graufesenque, Claudio-Flavian	Sels, Wiesb. OL, Novæs. LF, Xanten Cl-N, Trèves M.S., Hofheim, Pompeii, London, Colchester, York.
PRIMVS et SCOTTIVS	La Graufesenque	Neuss.
REGENVS	La Graufesenque, pre-Flavian	Sels, Wiesb. OL, Hofheim I, Colchester.
RVFINVS	La Graufesenque, Nero-Flavian	Wiesb. OL, Novæs. LF, Hofheim II, Pompeii, Rottweil, Carlisle, Newstead I, Camelon.
(i) SABINVS	La Graufesenque, Flavian	Aislingen, Pompeii, Carlisle, Newstead I.
SALVETVS	Montans, pre-Flavian	Xanten Cl-N, Colchester, Aislingen, London.
SCOTTIVS or SCOTIVS	La Graufesenque, pre-Flavian	Sels, Wiesb. OL, Novæs. LF, Hofheim I.



POTTER.	PLACE AND TIME OF POTTERY.	LOCALITIES WHERE HIS WORK HAS BEEN FOUND.
SCOTNVS or SCOTNS	La Graufesenque, SCOTNS may be SCOTIVS with liga- tured IV = N	Novæ. LF, St. Germain, Nîmes, Colchester.
(i) SECVNDVS	La Graufesenque, Claudio-Flavian	Sels, Wiesb. OL, Novæ. LF, Hofheim I, Pompeii, Rott- weil, Carlisle, Newstead I.
SILVANVS	La Graufesenque, Claudio-Flavian	Sels, Wiesb. OL, Hofheim, Rottweil, Newstead I, Arles M.S.
SVARAD VAPVSO	Banassac, Flavian South Gaul, pre- Flavian	Konstanz. Sels, Wiesb. OL, Xanten Cl-N, Hofheim I.
(i) VIRTVS or VIRTHVS	South Gaul, Claudio- Flavian	Sels, Wiesb. OL, Hofheim II, London, Carlisle (OF VIR- TVTIS),
(i) VITALIS	La Graufesenque, Nero-Flavian	Sels, Wiesb. OL, Novæ. LF, Hofheim II, Pompeii, Rott- weil, Carlisle, Newstead I.
VOFANGIVS	South Gaul	London, Arles, Avignon, Vichy, Mainz.

To this list may be added the following instances in which the identification of the plate or the potter is doubtful :

ANEXIA, ARCA[NVS, IASSVS, LITTERA and PRITMANVS.

In the foregoing list many potters, such as AQVITANVS, ARDACVS, BILICATVS, DARRA, LABIO, MACCARVS and REGENVS, had probably ceased work before the accession of Vespasian, whilst a large proportion date back to one or other of the reigns of Claudius or Nero.

The only potters who can be stated, with reasonable confidence, to have commenced work in the reign of Domitian are BIRACILLVS and IVLLINVS.

This form was made almost exclusively in South Gaul, Lezoux being very sparsely represented.<sup>1</sup>

<sup>1</sup> Fölzer illustrates a fragment (Fig. 42) as East Gaulish ; it is probably a "survival."

The only East Gaulish potter whose name has been identified with this form is IASSVS.

As he occurs in the Antonine period at Newstead, this example is probably a Form 31 in which the quarter-round moulding persists as a vestigial remnant.

*No. 6.—RITTERLING TYPE 1. PL. XLIV.*

Plate with a low wall, curved inwards at the rim.

This vessel is clearly an imitation of the Augustan platter Loeschke Type 4 B (Fig. 1). The upper or terminal portion of the wall is constricted on its external surface by a groove and is narrowed upwards. Above this constriction is a small moulding or lip. Internally, the lip is also, commonly, delimited by a groove (Figs. 2-5).

Gradually, and in the course of time, the lip becomes more pronounced and everted, until it merges into the type which is characteristic of the more prevalent form, Drag. 18, of which this platter must be regarded as the prototype. A comparison of the rim sections (Fig. 4 A, B, C) with those given under Form 18 (Pl. XLV. Figs. 4, 5, 6, 8) well illustrates the process of evolution.

The occurrence of a minute off-set, both internally and externally, at the junction of the wall with the base is especially characteristic of this form (Figs. 2, 3, 4, 6). A plate of this type in the Sels collection bears the stamp of MOMO.

This form occurs only in the Claudian period at Hofheim, and amongst the earlier "finds" at Xanten (H. AB. ITVS) and Aislingen.

In Britain it is somewhat sparsely represented, but good examples have recently been found in London (King William Street, OF MACCAR, OF MOM and NESTOR FEC).

Plates of this type in the British, Reading, York and Cambridge Museums are stamped respectively OF ABITI, OF MCCAR, MASCLVS and COCI OFIC.

The life of this platter does not appear to have extended far into the Flavian period, but inasmuch as it is undoubtedly the prototype of a later and Antonine form—Walters 79 (*q.v.*)—datable intermediate examples may yet come to light.

*No. 7.—DRAGENDORFF FORM 18. PL. XLV.*

Plate with a low, more or less oblique and slightly rounded wall, and a semicircular lip.

The evolution of this vessel from Ritterling's Type 1 (see Pl. XLIV.) is shown by the development of the rim, which in early examples has only a rudimentary lip (Figs. 5, 6, 8), and by the occurrence, in many of the older specimens, of the tiny ledge or off-set, both internally and externally, at the junction of the wall and base of the plate (Figs. 1, 9, 11, 12).

One or other of these off-sets may be absent even in early vessels, whilst the later examples are usually devoid of these features. Chronologically, the external off-set is the more important, inasmuch as the internal

*ledge* or *off-set* occasionally persists in the form of a small *ridge* in the later development of this plate, *i.e.* Form 31.

In Claudian examples the lip sometimes carries a groove on its upper curve, as at Hofheim—OFIC. SCO. The internal base is either horizontal or presents a continuous, low convexity (cf. Fig. 9 with Figs. 1, 2, 3, etc.), which should be distinguished from the commonly more or less abrupt apical cone which is so characteristic of the later developments of this form, *e.g.* 18/31 (Fig. 14) and 31 (*q.v.*). The foot-stand is either approximately triangular or rectangular in section (cf. Figs. 1 and 2 with Figs. 3 and 11).

In the course of time both the obliquity and the depth—as well as the thickness—of the wall increase, and concomitantly with these changes the wall loses its internal concavity, the lip becomes coarsened, and the basal interior, generally, more markedly convex.

Thus the transitional or Domitian-Trajan Form 18/31 is evolved. Two examples of this stage of development are illustrated (Figs. 14, 15). They represent the form as found in the Domitian-Trajan period at Kastell Wiesbaden and Gellygaer. The later development of this plate is treated under the heading of Form 31. The course of development above described is that which is typical of this plate, but it is evident from the records of competent observers that the need for a higher walled plate was felt at a somewhat early stage of Sigillata production, for Geissner attributes both forms 18 and 31 to the pre-Flavian potters AQTIVANVS and MODESTVS, whilst Walters (*C.R.P.* M 918, 920) assigns specimens of Form 31 to LABIO and MANSVETVS.

Form 18 was one of the earliest plates manufactured by the South Gaulish potters, and is found in abundance in the Claudian period at Hofheim. It persisted, in its true character, into the reign of Domitian, as at Newstead (Fig. 12).

It is doubtful whether the typical form continued into the second century, but the transitional plate of 18/31 is characteristic of Domitian-Trajan sites, such as Gellygaer, Wiesbaden Kastell and the Bregenz "cellar-find," dated to about 80-110 A.D.

Here the examples, for the most part, bear the stamps of potters who began work in the Flavian period, and whose activity extended over the junction of the first and second centuries, *viz.*: COSIVS RVFVS, L. C. VIRILIS, FRONTIVS, NATALIS, and L. T. SECVNDVS.

Variants of this form, with a high wall and concave base (Newstead I., Fig. 16; Carlisle, MOMMO), are sometimes found on first-century sites.

The high-walled plates from Aislingen and York (Figs. 17 PRIMVL PATER, 18 PATRICIVS) also date to the first century.

A rouletted circle on the interior base, almost exactly above the foot-stand, is not uncommon in larger examples both early and late. This technique is not infrequent in the later form, Drag. 31. This form was



manufactured both in South and Central Gaul, but is more especially a South Gaulish product.

Potters' stamps are numerous, and as an indication of the chronology and provenance of the form, the following are enumerated :

*South Gaul* : ABITVS, AQVITANVS, BALBVS, BASSVS, BILICATVS,  
LABIO, MACCARVS, MODESTVS, SCOTTIVS, VAPVSO,  
and many later or Flavian potters.

*Lezoux* : CARANTIVS, COBNERTVS, DAGOMARVS, IVLLINVS,  
PRIMVLVS, PRIMVLVS PATER.

Occasionally this form was produced in " marbled " technique : OFI.ARDAC (Silchester), OF MAPOMI (Leicester), OF PRIMI (Frankfort Museum).

*No 7 A.—DRAGENDORFF FORM 31. Pls. XLVI. and XLVII.*

Dish or plate with high oblique wall, semicircular lip, and convex base.

The stages in the development of this dish from the preceding type, Form 18, have already been described.

The low-walled plate, with sides presenting a slight outward curve, has become converted into a relatively high-walled dish, the sides of which show a decided outward inclination.

The comparatively flat basal-interior of the earlier type now presents, in the majority of examples, a well-marked convexity (Pl. XLVI. 2-16 ; Pl. XLVII. 1-7). The whole vessel has become coarsened and the lip correspondingly thickened.

The developed form, as above described, is essentially a second-century type.

Transitional forms, *i.e.* Form 18/31, appear in the late first century, but they are mainly characteristic of the " turn " of the first and second centuries, and are represented at Gellygaer, Kastell Wiesbaden (Pl. XLV. 14, 15), and in the Bregenz " cellar-find," all datable to about the years 80-120 A.D. At the beginning of the second century the transitional form was manufactured in East Gaul, *e.g.* by the potters LVCIVS (Pl. XLVI. 7) and PRIVATVS.

The developed dish does not appear in the Domitian period at Newstead, but it is common in the later or Antonine occupation (Pl. XLVI. Fig. 11), and is frequently found throughout the later three-fourths of the second century.

Two examples from the Pudding Pan Collection are illustrated (Pl. XLVII. 1 MACRIANVS, 2 ATILIANVS). Form 31 is represented at Niederbieber (Pl. XLVI. 16 NATALIS F ; Pl. XLVII. 4 FLORENTINVS F), where it did not long survive the close of the second century. In the third century it was largely supplanted by the platter, Drag. Form 32.

Potters' stamps are numerous ; the names are almost exclusively those of workers at Lezoux and in East Gaul, and perhaps more especially Rheinzabern.

We illustrate stamped vessels from both these sources :

- Lezoux* : Pl. XLVI. 2 SECVNDINVS, 4 BONOXVS, 6 ALBVCIVS ;  
Pl. XLVII. 1 MACRIANVS, 2 ATILIANVS.
- East Gaul* : Pl. XLVI. 5 TOCCA, 8 LVCIVS, 10 MICCIO, 12 CAPRASIVS,  
13 FIRMVS, 14 VENICARVS, 15 MARTIVS, 16 NATALIS ;  
Pl. XLVII. 3 CVNISSA, 4 FLORENTINVS, 5 CONATIVS,  
7 PRIMITIVS.

Many variants of this type are illustrated, and Ludowici's classification is appended.

No. 8.—*RITTERLING TYPE 8. Pl. XLVIII.*

Hemispherical bowl or cup with smooth wall.

This bowl bears some evidence of developmental relationship to the Augustan vessels Loeschke Types 13 and 6 (Figs. 1, 2), but a more obvious prototype is to be found in the vessel of Italic technique now in the British Museum (Fig. 3).

The uniformly smooth wall is devoid of decoration, with the not infrequent exception of a neatly formed groove at the junction of its upper two-thirds with its lower third (Fig. 7). Not uncommonly the groove is absent (Figs. 4-6, 8, 9).

Typically, the rim is constricted both externally and internally by grooves, and is thus converted into a rudimentary lip.

A special characteristic which this type shares in common with the form Ritterling 9 is the formation of the foot-stand and basal exterior.

The low foot-stand, which is usually broad below, approaching the rectangular in section, passes by a low curvature into the base of the vessel and is furnished with a "step" as in Form 29. The basal exterior thus presents a plastic ring, in the centre of which there is commonly a nipple-like projection (Figs. 4, 6, 7, 7A). This "step" and plastic ring are almost invariable characteristics.

The interior base is practically horizontal, thus differing from that of Ritterling Type 9, which generally displays a slight dip or concavity.

Three examples (Figs. 17-19) of the small varnished bowls, so characteristic of the Tiberio-Claudian period, are illustrated. They indicate the probable inter-influence of Sigillata and non-Sigillata contemporary products.

This bowl varies considerably in size (cf. Fig. 5 with Fig. 8). Examples have been found at Sels (*ante* 41 A.D.) and in the pre-Flavian layer at Wiesbaden, thus demonstrating that this cup must be placed amongst the earliest

products of the South Gaulish potteries. At Hofheim it occurs only in the Claudian period, and at Aislingen it is assigned to the earlier part of the occupation. In Britain it is found on Southern sites, such as Colchester and London, and as far north as Margidunum. In its true form it is probably a pre-Flavian product, but late variants sometimes occur which occupy a position intermediate between it and the later form, Drag. 40, e.g. the Corbridge example. This cup has a higher foot-stand than the true Claudian type, but the plastic ring and the nipple-point of its basal exterior bespeak a comparatively early date.

It is suggested that this form was the immediate prototype of the decorated hemispherical bowl, Form 37.

Occasionally this type was produced in "marbled" technique: Bordighera, Walters, *C.R.P.* M 124, CAS[TVS]; Trèves, illegible stamp.

The following potters' stamps have been recorded on Ritterling 8:

OF APRI (Leicester and Rheinzabern grave), AQVIT (Aislingen), OF BASSI C (Hofheim), OF BIO (London, Guildhall), BIO FE (London, King William Street), CAS (Bordighera), CASI F (St. Germain), OF COCI (London, Guildhall), OF CRES (Wiesbaden, old layer), FIRMO (Hofheim), OFI FIRM (Hofheim), ILLIOM (Suèvres), ILIOMAR (Ristissen), OF LABIO (Sels), OF MAT (London, Guildhall, and Aislingen), MVRANI (Hofheim), NALIS (Mainz), NICIO (Aislingen), NIGRI (Ristissen), PAVLLVS (Hofheim I.), OF PI[. . .] (Hofheim), OF PRIM (London, Guildhall), OFF SAB (London, Guildhall), SECVNDI (Colchester), TANDA (Strasbourg), TETI (Hofheim), TETI F (Colchester), VAPVSO FE (Xanten), VASSIL (London, King William Street).

#### No. 8 A.—*DRAGENDORFF FORM 40.* PL. XLVIII.

Hemispherical bowl with smooth, comparatively thick wall and high foot-stand.

This form was evolved through intermediate stages, such as that already noted as occurring at Corbridge, from the hemispherical cup, Ritterling Type 8.

It is to be distinguished from its prototype by its coarser and thicker walls, its higher and thicker foot-stand, and by the absence of the "step" and plastic ring from its basal exterior. These features are well shown in Figs. 10-16.

A bowl of this type was found in a Rheinzabern grave, dated to about 100 A.D., or a little later, with the stamp of the potter REGINVS and associated with Déchelette's Form 67.<sup>1</sup>

<sup>1</sup> Oelmann, *Niederbieber*, p. 23.



It does not, however, appear to have become plentiful until the second half of the second century, when it probably belongs to the same service as Form 32 (*q.v.*). It is not represented at Gellygaer, Kastell Wiesbaden, or Kastell Urspring (*ante* 154 A.D.).

At Castleshaw it is attributed to the reign of Hadrian.

Whilst it is not recorded in the second occupation at Newstead, it is represented in Trèves grave-groups of the Antonine period (Nos. 312 A and 248). At Niederbieber (190-260 A.D.) this form is found throughout the whole period, and is also present in a Trèves grave-group (No. 369) dated to the third century.

Drag. Form 40 was plentifully manufactured in the East Gaulish potteries, more particularly at Rheinzabern (Figs. 11 AMANDVS FE, 15 LVCINVS F).

The following stamps have been recorded :

Central Gaul : ASIATICI M, ATRI, AVSTRVS, IVSTI MA.

East Gaul : ALBILLVS F, AMANDVS FE, ANDECARVS FEC, ATRESTVS F, BITVN F, BITVNVS, DONATVS F, GENTIO, GRATVS F, HONORATVS F, IVVENIS FE, LILLVS F, LVCINVS F, LVCIVS F, LVTEVS, MAIANVS, MANO, MACCON OF, MARINVS F, MELAVSVS, MELAVSI, MELAVSVS FE, MELAVSVS F, MICCIO F, NOVANVS, OCIOSO, PACATVS F, PACATV, PEPPO F, POTENTINVS, PRIMANTIVS FE, PRIVATVS F, REGALIS F, REGINVS, REGINVS F, RHVS F, SABIEN, SACIANT F, SATVRIO F, SVADVLIVS F, CSS SEDATVS F, TRITVS F, VERECVND F, VICTORINVS, VIRILIS FE, VITALI.

#### No. 9.—DRAGENDORFF FORM 27. PL. XLIX.

Cup with constricted curvilinear wall terminating in an everted lip.

This cup was evolved from the Augustan vessel, Loeschke Type 11 (Figs. 1, 1 A, 1 B).<sup>1</sup> It had a long life extending from the early South Gaulish period down to the middle of the second century.

Its incidence, however, is considerably less frequent on second-century sites.

Thus it does not appear to have been found in the later period at Newstead<sup>2</sup> (140-180 A.D.), nor is it recorded at Niederbieber (190-260 A.D.), whilst at Rheinzabern it is sparingly represented in the products of a few potters, such as BVCCVS and DONATVS.

It is occasionally found in Rheinzabern graves, largely as a "survival."

<sup>1</sup> An early instance of this cup with the double curve occurs in a bronze Greek cyathos, Pl. XXXVII. 80.

<sup>2</sup> Curle, *op. cit.* p. 198.

Thus the example (Fig. 13) by the La Graufesenque potter SVLPI is clearly of first-century manufacture.

Apart from its technique, as manifested in paste and glaze, the two features which distinguish the Gaulish cup from its Arretine prototype are the absence of rouletting from its wall and the more markedly constricted outline of the vessel (cf. Figs. 1, 1 A, and 1 B, with Figs. 2, 5, 6, etc.).

On the other hand, certain details or elements of the earlier or Italian cup are frequently found in the older South Gaulish examples. Thus the rudimentary lip of the cup by FELIX (Fig. 10) from Margidunum, together with the slight external grooving of the upper part of the wall, are both present in the Augustan type (Fig. 1). In like manner the groove encircling the foot-stand of the Haltern vessel (Fig. 1) recurs in the early South Gaulish cups by PRIMVS (Fig. 3), VOTO (Fig. 4), FIRMO (Fig. 5), QVINTANVS (Fig. 6), ONCPA (Fig. 7), SENIS (Fig. 9), FELIX (Fig. 10), and SVLPI (Fig. 13), and is also noticeable in the Claudian example from Hofheim (Fig. 2).

This encircling groove appears to be a fairly constant pre-Flavian feature.

Generally, the lip is rounded, but in many of the earlier examples—and more particularly the larger cups—it is truncated above, and presents a more or less pointed or triangular section (Figs. 2, 5, 6, 8, 9, 12); and this peculiarity is usually accompanied by a slight inbending of the rim or lip.

The heavier and more rounded lip of the Flavian and Trajanic periods is well illustrated in the examples from Newstead I. (Fig. 11 ? DAGO) and York (Fig. 18 BIGA FEC).

A narrow groove on the internal surface just below the lip (also present in the Augustan cup, Fig. 1) is characteristic of early work. It is frequently absent in later cups (Figs. 16, 18, 19). The foot-stand is almost invariably high and roughly triangular in section, presenting a sharp angle on its exterior. The interior of the foot-stand is sometimes concave (Figs. 5, 13), and occasionally carries one or more grooves (Figs. 7, 10).

In size the vessel varies considerably, but in general the smaller vessels are more frequent in the pre-Flavian period; on the other hand, the larger cups occur both early and late. The strikingly deep-red colour and glossy surface of many examples of this form should be noted—these characteristics appear to have been due to a more perfect baking.

This cup is particularly plentiful in the Claudian period at Hofheim. It occurs at Aislingen, and is well represented at Newstead I. (79/80-86 A.D.).

It is recorded in the Domitian-Trajan period at Gellygaer (Fig. 17) and Kastell Wiesbaden (Fig. 16), and also in the Bregenz "Cellar-Find" of about the same date. At Pfünz (Figs. 15, 19) it may be assigned to the reigns of Trajan and Hadrian. This cup was occasionally produced in "marbled" technique: PRIMI in the Prov.-Museum at Trèves; see also an example in the Frankfurt Museum. It was also copied in Belgic Terra Nigra, as at Margidunum.

Form 27 was plentifully manufactured in South Gaul. It occurs more sparingly as a product of Central and East Gaul.

For the purpose of indicating its date and the centres of manufacture, a few names of well-known potters who made this cup are herewith enumerated:

*South Gaul*: AQVITANVS, BASSVS, CELER, COMICATO, CRESTVS, FELIX, IVCVNDVS, LICINVS, MACCARVS, MOMO, PASSENVS, PRIMVS, QVINTANVS, SILVANVS, VAPVSO.

*Central Gaul*: AESTIVVS, BONOXVS, CINTVSSA, DAGOMARVS, LIBERTVS (Walters, C.R.P. M 1632), PATERNVS (Walters, M 1635), SACER, SEDATVS.

*East Gaul*: BVCCVS (Walters, M 2311), DONATVS, REGINVS (Walters, M 2316). At Heiligenberg it is associated with the names of PAVLLINVS and TITVS RESPECTVS, but it is often unstamped at this pottery.<sup>1</sup> Some of these later potters worked both in Central and East Gaul.

No. 10 —*DRAGENDORFF FORMS* 22 (*small*) and 23 (*large*). PL. L.

Dish with vertical wall and flat base, with or without a rudimentary foot-stand.

The forerunner of this type is to be found in the Arretine form *Dragendorff* 4 (Fig. 1).

Its immediate Italian predecessor occurs in the Tiberian period at Aislingen (Fig. 3 GELI "in planta pedis") and in an example found at Colchester (General Collection, clvii. illegible stamp "in planta pedis").

May (*York*) also figures as Arretine a dish of this type found at York (Fig. 9).

The nearly vertical wall terminates above in a rounded lip (Figs. 2, 4, 5, 6, 9, 10), or it may be truncated above and present a decided eversion (Fig. 7).

Usually at the external junction of the wall with the flat base there is a rounded moulding upon which the vessel rests in default of a foot-stand.

Not infrequently the wall is interrupted about its middle by one or more grooves. The base may be decorated by circular grooves both inside and out.

This form, both in large and small sizes, is represented in the Claudian period at Hofheim, but during the Vespasian occupation the smaller dish alone is found.

<sup>1</sup> Forrer, *op. cit.* p. 99.



At Aislingen, where the occupation dates from the reign of Tiberius, the larger dish, *i.e.* Dragendorff 23, is the most frequent.

In the Flavian period at Newstead, the smaller type, *i.e.* Dragendorff 22, alone is represented (Fig. 10).

Examples occur at Colchester and in London (Guildhall and Bethnal Green Museums). It is only sparingly represented on Flavian sites, such as Newstead I. and Rottweil, and has not been recorded at Gellygaer, Kastell Wiesbaden, or amongst the Bregenz "Cellar-Finds," all datable to about the years 80-120 A.D. In its true form it is probable that this vessel was not manufactured in the second century.

Sigillata dishes with high walls, from Rheinzabern and Niederbieber, are figured (Figs. 11, 12) as illustrating a possible development of this form in the second and third centuries.

Potters' stamps are extremely rare.

#### No. 11.—DRAGENDORFF FORM 33. PL. LI.

Conical cup with outwardly inclined wall.

This form is probably related to the Arretine cup, Loeschke Type 10 A (Fig. 1), but its development may have been more strongly influenced by the early Gaulish non-Sigillata product in black ware, as found at Mont Beuvray (Fig. 2). Owing to its long life, considerable variations are met with in the detail-elements of this type.

In the earliest examples, as found in the Claudian period at Hofheim, *e.g.* Ritterling's Type 10 (Fig. 3), and in the pre-Flavian layer at Wiesbaden (MACCARVS), a slight ledge is present at the internal junction of the wall with the base. This ledge is found also in early cups at Silchester (Fig. 7 OF PRIMI), Colchester (1484.08) and Mainz (Fig. 4), and persisted down, though not invariably, into the Flavian period, as evidenced by the cup bearing the stamp of MERCA[TOR found at Colchester (271 P.C.).<sup>1</sup> Not uncommonly this internal ledge is associated with an external groove, also situated at the junction of the wall with the base (Figs. 3, 4, 7).

But the external groove may occur independently, as in a Flavian cup by IBERTVS <sup>2</sup> (Colchester, 1949.09), the vessel by COSIVS VI[RILIS] (Fig. 9), and the mid-second century example by MARTINVS (Fig. 14).

In the majority of early bowls the wall either shows a distinct external convexity or is practically straight, and cups with this characteristic occur throughout the first century (Figs. 3, 4, 5, 6, 9, and the Flavian 33 by MERCATOR already mentioned). Generally, the older cups have an entirely

<sup>1</sup> Sporadically, remnants of this ledge may be found in early second-century cups (VIDVCOS, Colchester).

<sup>2</sup> See Ritterling, *Hofheim*, p. 239, for Vespasian examples of this stamp. They probably represent the early plain work of the potter LIBERTVS.

smooth exterior wall (Figs. 3, 5, 6, 7, 9), but a median groove may occur at a comparatively early date (Fig. 4).

In the late Flavian period, and more especially about the "turn" of the first and second centuries, the wall of the cup shows a marked tendency to become concave externally (Fig. 8 Gellygaer), and a groove, situated variably about its middle, becomes an almost constant external feature (Figs. 10 TALVSSA, 12 PRIVATVS).

In the Antonine period, as at Newstead II. (Fig. 13), the external concavity of the wall approaches that of contemporary examples of the cup Drag. 46 (see Pl. LV.).

Towards the end of the Sigillata period the wall again shows a tendency to become straight, as in the example from York (Fig. 15) and that from a skeleton grave at Strasbourg (Fig. 18).

No pronounced lip is present, but the rim is usually demarcated by an internal as well as an external groove in the earlier vessels, *e.g.* those of the first and early part of the second century (Figs. 3, 4, 7, 10, 11); subsequently either one or both of these grooves may be absent (Figs. 15, 16 ATILIANVS, Pudding Pan Rock; 17 FLORVS, Niederbieber).

The base is usually wide and flat, but it may present a slight convexity (Figs. 8, 17). The foot-stand approaches a triangular profile in section, and, although at first of medium height, it tends to become relatively high in the later examples (Figs. 11 QVINTVS, 16 ATILIANVS, 17 FLORVS).

The oldest form, *i.e.* Ritterling Type 10, occurs in the Claudian period at Hofheim, and is not infrequent in the pre-Flavian layer at Wiesbaden. Early and probably pre-Flavian examples are illustrated from Mainz, Strasbourg, Xanten and Silchester (Figs. 4, 5, 6, 7). In the Domitian period at Newstead this cup occurs sporadically (C]RISPI M).

Although Form 33 is not represented amongst the "finds" at Kastell Wiesbaden, it is found at the approximately contemporary site at Gellygaer and in the "Cellar-Find" at Bregenz (80-110 A.D.). In the Antonine period at Newstead it is plentiful, whilst at Niederbieber (190-260 A.D.) it occurs throughout the whole occupation.

At Strasbourg it has been found in a skeleton grave, dated to the early fourth century. The example from York is also probably of late date (Fig. 15). Contrary to the generally accepted opinion, it will thus be seen that the conical cup must be placed amongst the earliest Sigillata products. Although relatively rare in the first century, it becomes common in the second and third centuries. About the middle of the second century it had entirely supplanted the cup Drag. 27, which is so plentifully found on first century sites.

Its proved life was a long one—perhaps the longest of all the plain forms—extending from the reign of Claudius down to the end of the Sigillata period.

Stamps are numerous, and we append, in illustration of the continuity

of the type, the following names of first, second and third century potters:

First century: ALBINVS, ALLIVS, BASSVS, BIRACILLVS, CARILLVS, CELSVS, CRISPVS, FRONTINVS, IBERTVS, LICINVS, MACCARVS, MERCATOR, MOMMO, PATRICIVS, PRIMVS, SASMONOS, SECVNDVS, SEVERVS, SILVANVS, SILVINVS, VITALIS.

Second century, extremely numerous, *i.a.*: ATILIANVS, AVENTINVS, BELINICCVS, MATERNVS, QVINTVS, SEVERINVS, etc.

Third century: FLORVS.

### No. 12.—DRAGENDORFF FORM 34. PL. LII.

#### The two-handled cup.

This cup, which is furnished with two loop handles, is comparatively uncommon in Sigillata technique. Its immediate prototypes are to be found in Augustan Sigillata and in metal cups.

The handles of an Italian Sigillata cup have been found at Haltern (Loeschcke Type 14, Abb. 51).<sup>1</sup>

Metal cups found at Bosco Reale (Pl. XXII. 1, 7) and Alesia (Pl. XXII. 11) bear a relationship to this type.

The early or Tiberian cup with rouletted wall, now in the Trèves Museum (Fig. 2), is probably a South Gaulish product.

Ultimately, this two-handled cup may be traced back to Greek and Etruscan fabric. Fig. 1 illustrates an Etruscan example in black ware of the second century B.C. Dragendorff's type form (Fig. 7) is more particularly associated with the pottery of Banassac.

The example from Newstead (Fig. 8) was found in association with Antonine objects, and a very similar cup, now in the Carlisle Museum (May and Hope, *Carlisle*, Fig. 108) probably dates to this period.

The outline of the York example (Fig. 9) suggests an even later date.

The variants, illustrated in Figs. 3, 5, and 6, from Naples, Rome and Florence furnish further examples of this cup in Sigillata technique.

Perhaps no Sigillata vessel exhibits more clearly the influence of metal prototypes (cf. the similarity of the handles of the Sigillata vessels, Figs. 7 and 8, with those of the Bosco Reale cup, Pl. XXII. 7). Furthermore, it furnishes a good illustration of the interpenetration of Sigillata and non-Sigillata ceramic types. The Viterbo cup in polished clay (Fig. 4), itself an imitation of a metal vessel, shows distinct affinities to the Sigillata type.

Similar two-handled cups in non-Sigillata technique have been found at Mont Beuvray (Bulliot, *Album*, Pl. XXIV. 8), St. Rémy in green-glazed fabric

<sup>1</sup> A two-handled cup in Italian Sigillata, by M. PERENNIVS, is now in the museum at Arezzo (Loeschcke, *Haltern*, p. 154).



(Déch. i. Figs. 34, 35, 50), Hofheim I. (Type 23) and Tharros, Sardinia (Walters, *C.R.P.* L. 49, Pl. XVII. red ware decorated *en barbotine*). At Arezzo two-handled cups, in both metal and glass, have been found (Loeschcke, *op. cit.* p. 154).

No. 13.—*DRAGENDORFF FORMS 35 and 36.* PL. LIII.

- (a) Cup with rounded wall, and curved rim decorated *en barbotine*.
- (b) Shallow dish or wide bowl with rounded wall, and curved rim decorated *en barbotine*.

No Arretine prototype of this form can be definitely indicated, and the South Gaulish potters appear to have been at work for close upon half a century before this vessel, in either its small or large variety, was evolved.

A shallow dish of Italian technique, from Tharros, Sardinia, now in the British Museum (Walters, *C.R.P.* L. 52), may perhaps be regarded as having some affinity to this type; but whilst it possesses the curved rim decorated *en barbotine*, its wall is externally concave and displays an angle at its junction with the base.

More nearly related is the shallow dish or plate with flat rim, decorated *en barbotine*, and with an angular junction of the wall with the base, as found at Colchester and Leicester (Figs. 1, 20). The Colchester example was found in a grave-group (No. 69), and was associated with the potters' stamps OF CRESTI (Form 27), CELSI OF (Form 15/17), and OF PONTI (Form 15/17). Its low foot-stand is suggestive of the influence of contemporary *terra nigra*.

Both these vessels are of extremely good technique, and may be regarded as, at least, contemporary with the earliest examples of the more common and typical forms, 35 and 36, upon which this type appears to have exerted some influence, as indicated in the Flavian example from Newstead I. (Fig. 5), in which the rim is relatively flat and not definitely curved downwards.

Evident successors of this flat-rimmed type are seen in the late Flavian dish from Margidunum (Fig. 6) and in an example at Colchester (Taylor Collection, cxxxix.).

Typically, both Forms 35 and 36 possess the same structural features, viz. the smooth rounded wall and the curved rim decorated with conventional ivy leaves or lotus buds. The interior base is either flat or slightly concave in the majority of examples, but it may occasionally present a slight convexity (Figs. 4, 7, 10, 14, 17), and this last feature is more characteristic of the later vessels.

The foot-stand, which is relatively low in Form 36, is of medium height in the cup-type.

It approximates to a rectangular or triangular profile in section, but, in the second century, it may closely resemble the foot-stand of Form 37 (Fig. 13).

Form 36 is distinguished from Form 35 by its greater diameter and the relatively low curvature of its wall.

They have been separately defined for chronological purposes, the cup (Form 35) being most plentiful in the Flavian period, whilst the dish (Form 36), although probably equally early in origin, is by far the most prevalent type in the second century.

Form 35 appears first in the reign of Nero, as evidenced by its occurrence in the Wiesbaden Peat Layer and in the legionary camp at Novæsium.

At Hofheim it is not represented in the Claudian period, and is only sparsely found in the second or Vespasian occupation.

The example from Aislingen is probably of early date (Fig. 2).

This cup-form is well represented in the Flavian period at Newstead (Fig. 3) and Vindonissa, but it may be doubted whether its manufacture extended far into the second century, *e.g.* beyond the Trajan-Hadrian period.

To this date may be assigned the specimen from Pfünz (Fig. 4) and that from the Bayford Cemetery, Sittingbourne (Fig. 8), where it is associated with early examples of Curle's Type 15 and Dragendorff's Form 46 (*q.v.*).

Sporadically, it may be found, either with a decorated or a plain rim (Fig. 16), under circumstances which point to the middle or second half of the second century, as in the Pudding Pan Collection.

An example with strap-handles, probably of Flavian date, has been found in a grave at Xanten (Fig. 18). It closely resembles the strap-handled bowl to be described later (see Pl. LIV.).

The cup-form was not manufactured at Heiligenberg or Rheinzabern.

These cups frequently vie with early examples of Form 27 in the brilliancy or lustre of their glaze.

The dish (Form 36) is represented in the Flavian period at Newstead (Fig. 5) and Rottweil, and continued to be manufactured throughout the second century, as proved by its sites of provenance, such as Rheinzabern (Figs. 14 DONATVS F and 21), Pudding Pan Rock (Figs. 15, 19), and Niederbieber (Fig. 17 IVVENI).

At the latter place it is assigned to the end of the second century.

A gradual increase in size and general coarsening of the whole vessel is to be noted in the later examples (Figs. 13, 14, 15).

Variants of Form 36, without decorated rim, are of occasional and late occurrence (Figs. 19 Pudding Pan Rock, 21 Rheinzabern).

Both these forms were occasionally produced in "marbled" technique, *e.g.* Form 35, Walters, C.R.P. M 127 from Arles; Form 36, Mainz Museum.

Potters' stamps are only known on second-century forms, and proceed almost entirely from Rheinzabern, and, to a less extent, from Trèves and its branch at Heddernheim.

Rheinzabern : ABBO FE, AVETEDO F, CINVS FECIT, COSTVTVS, DONATVS F, EVRETVS F, GEMELLVS FEC, IVVENIS FEC and IVVENI, MARTIALIS MA, OVINI O, PATERNVS F (not the Lezoux potter), PATRVINVS, PERPETVS, PIPPIVS FE, PRIMITIVOS F, QVARTINVS F, RESPECTINV, RESTITVTVS, SATVRIO, VERINVS, VICTORINVS.

Trèves : COBVNA FE (probably at Trèves), FRONTVNATVS, MINVTVS F, VRSVLVVS.

Heddernheim : AMMIVS.

At Luxeuil the stamp of the potter IANVARIVS occurs on Form 35 and may be of Lezoux manufacture.

*No. 14.—DRAGENDORFF FORM 42, AND VARIANTS. PL. LIV.*

Bowl with rounded wall, curved rim, overhanging lip, and strap-handles.

This vessel appears to present many affinities to the companion forms, 35 and 36. Like them, it can be separated into two services : a somewhat deep cup (Figs. 3, 5, 6, 8-10) and a shallow dish (Figs. 1, 2, 7), both of which not infrequently have their rims decorated with conventional ivy leaves *en barbotine*. It resembles them also in possessing the same rounded wall and curved rim ; but it is distinguished from them by the presence of strap-handles and an overhanging lip.

The earliest example of this form is seen in the Vespasian cup from Hofheim (Ritterling 14), in which, however, the handles are lacking (Fig. 5 A). The small cup from Rottweil (Fig. 5) closely resembles Ritterling 14 in size, differing merely in the addition of barbotine decoration and handles.

A companion type to Ritterling 14, corresponding to the service of the shallow dish, has been recorded at Rottweil and is figured for comparison (Fig. 2 A).

A connecting link between the typical cup with strap-handles and Form 35 is to be found in the handled cup from Xanten (Pl. LIII. Fig. 18), which can be dated to the first century. A similar cup occurs at Avenches, and both examples differ from the cups figured on the present plate by their greater depth relatively to their width.

Italian influence appears to have taken some share in the development of this form, as evidenced by a certain resemblance of the cup service to Loeschcke's Type 7 A (Pl. LV. Fig. 1) ; whilst the presence of a Medusa medallion in the dish in the Guildhall Museum (London), Fig. 6, is suggestive of the influence of Cales ware, in which similar medallions in the centre of platters frequently occur.

In the cup by NICEPHOR (Fig. 8), both the external groove and the



internal grooves (below the rim) of the Augustan vessel persist. In the cup stamped by SABINVS (Fig. 10) the internal grooves are found.

The lip in this vessel recalls that of the companion forms Drag. 46 and Curle 15 (*q.v.*), the incidence of which occurs chiefly in the first two-thirds of the second century.

The variant exhibiting an obtuse-angled junction of the wall and the base (Fig. 4) is obviously a vessel of the same type as Curle 15, furnished, however, with strap-handles.

The presence of the early type in the second period of occupation at Hofheim, and the occurrence of the potters' stamps of DAGOMARVS (London, Guildhall), NICEPHOR, and SABINVS, date this bowl—at any rate the cup service—to the Flavian period. It continued to be produced in the Trajan-Hadrian period, as evidenced by the stamps of BONOXVS (Fig. 9) and BIGA FEC (Updown, Kent). The dish service from Colchester (Fig. 7) with the somewhat doubtful stamp of MARCELLIN was probably made by MARCELLINVS<sup>1</sup> of Lezoux, who must be distinguished from the Hadrian-Antonine MARCELLINVS who worked at Rheinzabern and Westerndorf.

No. 15.—DRAGENDORFF FORM 46. PL. LV.

Campanulate cup with pendent lip and cornice-rim.

Although it is difficult to trace the evolution of this typically second-century form to an Italian prototype, it bears, nevertheless, some resemblance to the Sigillata cup Loeschcke Type 7 A (Fig. 1), and a still nearer affinity to the Belgic imitation of this vessel, Loeschcke Type 77 (Fig. 2).

The Belgic cup or dish presents many of the characteristic features of Dragendorff's form, *e.g.* the externally concave wall, the pendent lip and the cornice-rim (cf. Fig. 2 with Figs. 5, 7, 9), and it is probable that the influence of native or indigenous ceramics played a part in the development of the Sigillata vessel. Koenen (*Gefässkunde*, p. 94) places its earliest appearance in the first *Kaiserzeit*, and it is not improbable that definitely first-century examples may yet be forthcoming.

The technique of the Silchester cup (Fig. 15) is suggestive of the first century, but the campanulate cup is not found with any frequency until the Trajan-Hadrian period, as at Wiesbaden Kastell, Gellygaer, Trèves (grave-group No. 971) and Pfünz (Figs. 4, 5, 6, 10).

Ritterling's Vespasian Type 14 (Fig. 3), however, proves that some of the elements of this cup, *e.g.* the pendent lip and cornice-rim, were produced in first-century Sigillata.

At Gellygaer a transitional form between Ritterling's Type 14 and Dragendorff's Form 46 is forthcoming (Fig. 4). At the close of the second

<sup>1</sup> A Form 18 by this potter is in the British Museum, and the same stamp MARCELLIN has been found at Moulins, Bavai and Vichy.

century this cup is found at Niederbieber, where it is regarded as a survival and referred to the earliest period of the occupation, viz. *c.* 190 A.D. (Fig. 18).

The campanulate cup is characterised by the following features :

The wall is concave externally to a varying degree of curvature, and is usually smooth and devoid of grooving.

Not uncommonly, at the junction of the base with the wall, there is an external groove or one or more " steps " (Figs. 5, 6, 7, 8, 12, 15, 19, 20). The median groove, so characteristic of the exterior wall of the majority of specimens of Form 33 (particularly in second-century examples), is occasionally present (Fig. 9), and particularly so in later and more or less untypical examples (Figs. 17, 21, 23, 24). The lip overhangs markedly, and is usually delimited internally by a groove, above which the rim commonly projects upwards.

This feature may conveniently be described as a " cornice-rim " with a shelf eminently suitable for supporting a lid.

The lip in cross-section may be rounded or nearly rectangular. In some cases the pendent lip is distinctly undercut (Figs. 5, 7, 9, 10). The base is broad and almost invariably flat, but sometimes displays a slight central convexity (Figs. 5, 13, 19).

In general, the foot-stand approaches a rectangular profile in section and is of medium height.

This form was manufactured in Central and East Gaul. Evidence of a South Gaulish origin is not yet forthcoming.

At Heiligenberg it occurs in the Trajan-Hadrianic period (Fig. 9), but only sparingly. At Rheinzabern it is found in typical form, but with small handles (Fig. 11 Ludowici Bc), and in a rectangular-rimmed type with upturned lip and the median groove of Form 33 (Fig. 17 Ludowici Bd). Interinfluence is evidently present between this form and Dragendorff 33, for in the middle and latter part of the second century variants were produced which combined features of both types, as shown by the examples illustrated from Rheinzabern, Niederbieber, and the Pudding Pan Rock (Figs. 17, 18, 21, 23, 24, 25).

In many of these examples the curvature of the wall is less marked than in the typical form, thus approaching that of the later examples of Form 33. Many of them display a median groove (Figs. 17, 23, 24), whilst all possess the outwardly protruding lip of Form 46. This lip may be flat (Figs. 20 Ludowici Bc, 23 Ludowici Bb) or curved downwards (Figs. 24, 25).

In an example from Niederbieber the lip is decorated *en barbotine* (Fig. 24).

Curle's Type 16 (Fig. 16) is introduced in order to show the relationship of Forms 33 and 46 in the Antonine period.

Potters' stamps are rare and usually occur only on the later examples, e.g. a rosette stamp (Fig. 13), MARINVS (Fig. 21), IVLIANVS (Fig. 23), and VIRILIS F (London). The period of the chief incidence of this cup should

be placed in the first three-fourths of the second century, and, in typical form, it may be doubted whether it survived the close of this century.

Form 46 clearly belongs to the same service as the campanulate dish, Curle Type 15 (see Pl. LVI.). They occur together in an interesting associated group of the Trajan-Hadrian period found at Bayford, Kent, now in the British Museum.

*No. 16.—CURLE TYPE 15. PL. LVI.*

Campanulate dish with upturned rim (cornice-rim).

This dish is a companion form to the campanulate cup, Drag. 46, as is clearly indicated by its approximately contemporary incidence, its occasional associated provenance, and the common possession of an externally concave wall and upturned rim.

The wall presents a marked external concavity, and its obliquity is pronounced. The rim is usually set at an angle to the wall, from which it is delimited by an internal groove, and it thus projects upwards forming a terminal ridge to the interior of the vessel, probably to facilitate the use of a lid. Not infrequently the rim is flattened externally, and is therefore practically rectangular in section in many instances (Figs. 7-11, 15); occasionally it is furnished with a pendent lip (Figs. 1-3, 8), as in Drag. 46.

The base is usually concave internally, but in the earlier and smaller examples it may be flat (Fig. 4 Heiligenberg, 15 Ludowici Tz), and in the Bayford "find" in the British Museum. In these earlier vessels the comparatively low wall and flat base results in a platter rather than a dish-form.

At the external junction of the wall with the base a "step" or groove is sometimes observed (Figs. 1, 2, 5, 6, 8), a feature of not uncommon occurrence in the campanulate cup (see No. 15). The foot-stand is substantial and approaches a rectangular profile in section.

No first-century example of this form has been recorded, but it begins to appear with some frequency in the Trajanic period, as at Wiesbaden Kastell and Bayford, Kent (in a group associated with Form 46). It is found on the Outer German Limes Forts, which are dated from 120/140 A.D. downwards, and also at Pfünz (Figs. 6, 7, 11). It occurs at Rheinzabern (Figs. 5 Ludowici Tc AVETEDO F, 10 Ludowici Tv, 12 Ludowici Tt).

In the Antonine period it is found at Newstead (Fig. 1) and Trèves (Fig. 2, grave-group 312 A), and second-century variants occur at Margidunum (Fig. 3), Housesteads (Pl. LXVIII. 3), and London (Pl. LXVIII. 8). In a Caerwent example the rim carries a series of exterior grooves (Pl. LXVIII. 4), and a variant with downturned rim is illustrated from the Pudding Pan Rock Collection (Fig. 14). At Niederbieber it occurs sporadically (Fig. 13) in a deep and dish-like form.



Probably the campanulate dish did not long survive the close of the second century, but it should be noted that a dish with upturned rim has been assigned to the early fourth century (Niessen Collection, Taf. LVI. 1385).

Many of the earlier examples are of good technique, but in the second half of the second century most specimens are coarse and of poor glaze.

Potters' stamps are uncommon, but we illustrate a Rheinzabern example, Ludowici Ts' (Pl. LXIX. 7), with the stamp of COMITALIS F.

No. 17.—DRAGENDORFF FORM 39. Pl. LVII.

Oval tray or circular plate with flat auriculate (or trilobed) handles, which are frequently ornamented either in relief or *en barbotine*.

The oval trays appear to be somewhat older in date than the circular plates, and are usually assigned to the end of the first century or the beginning of the second century. A fine specimen in the British Museum (Fig. 1) is decorated by figures in relief, some of which, such as the crane devouring the serpent, the cocks and the wrestlers, seem to be of first-century origin. In this case the whole of the flat margin is decorated, but the two ends are widened to form handles and are flanked by heads of geese or swans, as on a fragment of a mould from Lezoux (Déch. ii. Pl. VII. 8). This type was not made in South Gaul, and probably belongs to the school of LIBERTVS of Lezoux. A fragment at York (May, *York*, Pl. VII. 2) bears the monogram  $\alpha\delta$  of DOECCVS, whilst another example figured by Déchelette<sup>1</sup> is stamped DOCCIVS, perhaps a variant of the better known stamp DOECCVS.

The same form is found in green-glazed ware (white paste) in a tray from Neuss,<sup>2</sup> and also in glass at Cologne.<sup>3</sup> Behn states that this is in imitation of a bronze tray, as in a specimen at Trèves;<sup>4</sup> and this group of vessels, as a whole, is clearly copied from prototypes in metal. Yet the type is an old one, for similar cups with auriculate handles are known in Villanova pottery.<sup>5</sup> Augustan prototypes in beaten silver occur in the Bosco Reale treasure.<sup>6</sup>

The circular plates with flat, auriculate handles decorated *en barbotine* can be dated to the Antonine period, and appear to be entirely a product of Rheinzabern. The decoration is either entirely floral (ivy leaves, etc.), Fig. 2, or a combination of birds (*e.g.* a peacock) with conventional ivy leaves.<sup>7</sup> The specimens figured on our plate (Figs. 2 and 5) are both from

<sup>1</sup> Vol. ii. p. 318, Fig. q. This, however, is more probably the narrow handle of a casserole.

<sup>2</sup> Behn, *Röm. Keramik*, No. 1212, figured by Lindenschmidt, *Alt. uns. heidn. Vorzeit*, 960.

<sup>3</sup> *Bonn. Jahrb.* 114/15, p. 353, Abb. 2 E, and Koenen, *Gefässkunde*, Pl. XI. 18.

<sup>4</sup> Lindenschmidt, *Centralmus.*, Taf. xxv. 28.

<sup>5</sup> Montelius, *Civil. primitiv.*, Series B, Tav. 283, 1.

<sup>6</sup> *Monuments Piot*, v. Pl. XXIII.-XXV.

<sup>7</sup> Behn, *op. cit.* No. 1416, Abb. 16, 1; example from Bingerbrück, stamped IVVENIS FE.

Rheinzabern, and are stamped CATVLLVS F and VERVS F respectively, and our Figs. 3, 5 and 6 are wholly devoid of decoration.

A similar circular plate with trilobed handles from Mainz is decorated, not *en barbotine*, but has a white floral design on a red-painted ground, and is ascribed by Behn<sup>1</sup> to the potteries of the Wetterau.

Finally, oblong, quadrangular trays with barbotine decoration on the flat rim are occasionally met with. A fragmentary example from Bonn<sup>2</sup> shows figures of a lion and a hunter, whilst other cases<sup>3</sup> may merely show a dotted geometrical design. Drexel<sup>4</sup> refers to quadrangular, silver trays, which are evidently the prototype of this rather rare form. It does not appear to have been found in Britain.

No. 18.—WALTERS FORMS 79 and 80. PL. LVIII.

Plate or shallow dish with curved wall, inturned rim and flat base.

This plate, in its typical form (Fig. 1), is evidently a copy in coarser and thicker material of the early type Ritterling 1 (see Pl. XLIV.).

The inturned rim, demarcated internally by a groove, the slight ledge or groove at the internal junction of the base with the wall (Figs. 1, 2, 5, 8), and the flat base are all characteristics of its pre-Flavian prototype. Intermediate examples do not appear to have been recorded, but doubtless they will yet be forthcoming.<sup>5</sup>

This plate occurs in both a large (Figs. 1, 2, 5, 7) and small form (Figs. 6, 8, 9), evidently comprising two members of the same service. The foot-stand approaches a rectangular profile in section, and is of medium height in the larger examples (Figs. 1, 2, 5), whilst in the smaller it is relatively high (Figs. 6, 8).

This plate was manufactured at Lezoux (Figs. 2, 5 ATILIANVS, 8 CATIANVS), Rheinzabern (Fig. 1 REGALIS), and Trèves (Fig. 6), but, apparently, not at Heiligenberg. Commencing in the prototype (Ritt. 1) as one of the earliest South Gaulish products, it was subsequently successively introduced in a coarser form into Central and East Gaul.

Its greatest incidence—apart from the plate Ritterling Type 1—so far as present knowledge goes, is in the Antonine period, and it belongs typically to the second half of the second century.

This vessel is frequent in the Pudding Pan Collection, occurring here in large, medium and small sizes (Figs. 2, 5, 8). In typical form it does not occur at Niederbieber (190-260 A.D.), but a variant vessel (Fig. 3 ATILIDO),

<sup>1</sup> *Op. cit.* No. 1291, Taf. vi. 1 and Abb. 20.

<sup>2</sup> *Ibid.* No. 226.

<sup>3</sup> *Ibid.* No. 1417 from Mainz.

<sup>4</sup> *Bonn. Jahrb.* cxviii. p. 232; and see also

a Bosco Reale tray, *Monum. Piot.* v. Pl. XXII. 5.

<sup>5</sup> The stamp of the Rutenian potter MARCVS (MARCIM) occurs on this form, both at Silchester and Colchester, and is suggestive of an intermediate example.

similar to Ludowici Th (Fig. 4 *STABILIS*), has been found on this site. This vessel has a concave base, and is deeper and more dish-like than the typical plate, but still retains the moulded lip of the type-form.

It is probably a later form, and is intermediate between this type and Dragendorff Form 32.

Forms 79 and 80 have not been recorded in skeleton-graves.

The variant, Fig. 5 (Pan Rock), as well as Ludowici Tl (Fig. 7), lacks the typical "inturn" of the rim and also the internal grooving which delimits it in the normal type (Figs. 1, 2, 8).

It is interesting to note in Ludowici Tl (Fig. 7 *CONSTANS*) the "step" at the external junction of the base with the wall, a common feature in the prototype Ritterling 1 and in early examples of Form 18.

The following potters' stamps have been recorded :

*On Form 79 :*

1. Lezoux potters : *ACER F* London (Guildhall), *ADVOCISI OF* London (G.H.), *ALBVC[* London (G.H.), *ATILIANI OF* Corbridge, *ATILIANI O* Silchester, *ATILIANI M* Pan Rock, *ATILIANI* Pan Rock, *ATRVCA F* Silchester, *BELSA ARVI* Pan Rock, *CAMPANI O* Pan Rock, *CARATILLI M* Pan Rock, *CINIVS M* [? error for *CINTVS M*] Pan Rock, *CINTVS M* Pan Rock, *CRACINA F* Pan Rock, *DAMINI M* London (Brit. Mus.), *DOECCVS* Wroxeter, *DOVECCVS* Carlisle, *DVPPIVS F* Leicester, *GEMENIA* London (G.H.), *MARTINI M* Pan Rock, *NAMILIANI* London (G.H.), *OLLOGN[* Corbridge, *PAVLLI* Pan Rock, *POTITIANI* Corbridge, *POTITINI M* London (B.M.), *PRISCI M* Corbridge and Lancaster, *QVINTI M* London (G.H.), *REBVRRI OF* Wroxeter, *SACRILLI M* Pan Rock, *SEVERIANI MA* Pan Rock, *SECVNDILLI M* London (B.M.), *SEXTI M* Wroxeter, *TITVRONIS OF* Corbridge, *TITVRONIS* London (G.H.).

2. Rheinzabern potters : *GENIALIS M* Silchester, *IVVENIS* Strasbourg, *MICCIO F* Corbridge, *REGALIS* Silchester.

*On Form 80 :*

1. Lezoux potters : *ADVOCISI OF* London (G.H.), *ADVOCIS M* Silchester, *ALBV* London (B.M.), *CATIANVS* Pan Rock, *ELVILLI* London (B.M.) and Colchester, *MARTI M* London (B.M.), *METTI M* London (G.P.O.), *PAVLLVS* London (B.M.), *RIPPINI* London (G.H.), *TINTIRI OM* London (H.H.), *TITVRONIS OF* London (B.M.), *TITVRONIS* London (G.H. and G.P.O.), *TITI OFFIC* Corbridge, *VENERAND* London, rosette stamp Xanten.

2. East Gaulish potters :

*On Form Th :* *STABILIS* Rheinzabern.

*On Form Tl :* *AVETEDO F*, *CONATIVS F*, *CONSTANS F*, *DONATVS F*, all at Rheinzabern.

*On Form 80 :* *PECVLIARIS F* London (G.H.) and Corbridge.



No. 19.—*CURLE TYPE 23 AND LUDOWICI TYPE Tb. PL. LIX.*

Dish with straight, oblique wall and (a) curved rim and overhanging lip (Curle Type 23), (b) flat rim with or without a lip (Ludowici Type Tb).

The wall, although oblique, is practically straight in section, and is prolonged outwards at its summit into a curved (Fig. 1) or flat rim (Fig. 2) of varying degree. The internal junction of the wall with the rim may be gently rounded, as in Curle's Type 23 (Fig. 1), or may present a definite angle, as in Ludowici's Type Tb (Fig. 2); and this angular junction is correlated with a flat and slightly inclined rim, usually without a terminal lip (Figs. 2 AISTO, 3, 4 PRIVATVS).

But a lip may be present in intermediate types (Figs. 5, 6 RESTVVS, 8 IVLIVS, 9 LILLVTIVS) or those which display a tendency to combine both the curved and flat rim. In both types, *e.g.* A and B, the wall joins the base of the vessel at an obtuse angle. The interior base is usually gently concave, but sometimes it is distinctly flat (Figs. 7, 10, 12).

The foot-stand is broad and approaches a rectangular profile in section.

This form was manufactured at Lezoux and in East Gaul, where Ludowici's type is especially associated with the pottery of Rhein Zabern.

It varies considerably in dimensions, and occurs in two sizes—a larger or dish-form and a smaller or cup-like form—as at Mainz (Fig. 7 VENICARVS) and the Pan Rock (Fig. 12), both evidently belonging to the same service.

The Pan Rock specimen shows considerable affinities to variants of the campanulate cup Drag. 46 (*q.v.*).

Vessels of this type are found at Pfünz (Fig. 3), Newstead II. (Fig. 1), in the Pudding Pan Collection (Figs. 10, 11, 12), and also at Niederbieber (Fig. 8 IVLIVS), where it is referred to as a survival occurring in the early occupation *c.* 190 A.D.

Taken as a whole, the type is one which is essentially of the second century, and it may be assigned more specifically to its last two-thirds.

It is difficult to trace the early development of the dish with the curved rim, but that with the flat "bevelled" rim, which appears at least as early as the Trajan-Hadrian period (Fig. 4 PRIVATVS), is probably a copy of an older form with rim decorated *en barbotine*, examples of which occur as early as the reign of Nero (see Pl. LIII. Fig. 1 Colchester, Fig. 20 Leicester) and in the late Flavian period (see Pl. LIII. Fig. 6 Margidunum).

Potters' marks and rosette stamps are frequent on this form, *e.g.* at Rhein Zabern<sup>1</sup> the following have been recorded: ABBO FECIT, ABBO FE (in grave with coin of Trajan), AISTO F, APER E, ATRESTVS, AVETEDO F, AVGVSTALIS FEC, AVGVSTALIS, BELSVS F, CARANI F, CARATA F, CATVLLVS E, CELSVS FE, CELSVS F, CIBISVS FE, CONATIVS F, CONATIVS, COSTIO, DATIVS FEC, DVBITATVS F, FATO FECIT, FAVENTINVS, FIRMANVS, FLORENTINVS FE, IVLIVS,

<sup>1</sup> Some of these potters may also have worked at Lezoux.

IVLLIN, IVSTVS F, IVSTVS, LIBERALIS F, LILLVS F, LVPVS FE, MAGINVS, MAIANVS, MARCELLVS, MATTATVS, MOTVS, PACATVS, PERPETVS, PRIMITIVOS, PRIVATVS F, SOLLEMNIS, VENVSTVS, VERINVS F, VICTOR, VICTORINVS (in grave with coin of Hadrian), VICTORINVS F, VIRILIS FE, VIRILIS F.

In addition : AVRELIVS F Cannstatt, CEFALIO Rückingen, GEMELLVS FEC Strasbourg, IANVARIVS Zugmantel, LILLVTIVS F Mainz, PRIVATVS Mainz, RESTVTVS F Mainz, VENICARVS Mainz.

*No. 20.—LUDOWICI TYPES Tg, Tf', Ob and Tx. Pl. LX.*

Bowl or dish with rounded wall (angular in the variant Tx), horizontal flat rim and upturned lip.

This type, often in coarse thick ware, was manufactured at Lezoux, Heiligenberg, Rheinzabern, and possibly at Westerndorf. The larger dish-like type is very similar to the ornamented Form 71 made at Lezoux (Pl. XX. 6), and was probably derived from it by a reduction in the width of the horizontal rim, since it was no longer required for purposes of decoration.

It often shows a slight step in the interior (Figs. 3, 6, 7) which may be a relic of the double curve shown in the wall of the shallow dish from Heiligenberg (Fig. 4).

It shows affinities to Drag. Form 51, but in this case the side forms a distinct angle to the base, as in Curle's Type 23.

In the cup Ludowici Tx (Fig. 8), this angular junction of the wall with the base is well marked.

In Britain the provenance of this bowl is widely distributed, for examples have been found at Caerwent (Pl. LXVIII. Fig. 6), Carlisle (May and Hope, *Carlisle*, Fig. 105), Colchester (Pl. LXVIII. 7), London, Silchester, and York.

It occurs in the Antonine Grave Groups, 262 and 379, at Trèves, and in the Pudding Pan Collection (CATIANVS), but is not represented at Niederbieber. Its chief incidence would appear to occur in the Hadrian-Antonine period.

Potters' marks are not frequent ; the following have been recorded :

ADVOCIS F Lezoux potter at Silchester.

Tg : CATVS FEC, CONATIVS F, CONSTANS F, CORADVS F at Rheinzabern and CL . MEN . . . at York.

Ob : SVADVLLIVS F at Rheinzabern.

Tx : FLORENTINVS FEC, FLORENTINVS FE, PRIMITIVS and VENICARVS at Rheinzabern.

No. 21.—*DRAGENDORFF FORM 44 and WALTERS FORM 81.*  
PL. LXI.

(A) *Dragendorff Form 44* :

Bowl with well-marked lip and a horizontal flange, which is situated (within variable limits) at the junction of the upper two-thirds with the lower third of the wall of the bowl.

(B) *Walters Form 81* :

Bowl with everted rim and pronounced horizontal groove, situated (within variable limits) at the junction of the upper two-thirds with the lower third of the wall, which it undercuts.

(A) Dragendorff Form 44 displays a close affinity to his Type 38, from which it is to be distinguished by the situation and narrowness of its horizontal flange, often reduced to a mere projecting ridge.

The contour of the vessel may be somewhat bulbous, as in the example from the Antonine period at Newstead (Fig. 1) and in the specimen from Niederbieber (Fig. 3). On the other hand, the shape of the bowl may be hemispherical, as in the example from Rheinzabern, Ludowici S1 (Fig. 2), which may be dated to the Hadrian-Antonine period. A similar contour is shown in the bowl from Pfünz (Fig. 4). The example from the Pudding Pan Rock (Fig. 5), assignable to the second half of the second century, is a small and shallow variety approaching Ludowici Tn' in character.

Dragendorff Form 44 may typically be attributed to the second half of the second century. The form had indeed already made its appearance in Terra Nigra at the end of the first century ;<sup>1</sup> and it was probably transferred to Sigillata as early as the reign of Hadrian, as in the small specimen found at Holt.

(B) Walters Form 81 is apparently an early development from Dragendorff Form 44. The rim, which is now devoid of a lip, becomes everted and the flange aborted in such a manner that the wall of the vessel partly overhangs a deep groove situated in the position previously occupied by the flange.

Ludowici Sn (Fig. 6) illustrates an intervening type displaying the everted rim of Walters 81 combined with the horizontal flange of Dragendorff 44.

Form 81 was made in two sizes, viz. a small (Fig. 7) and a large variety (Fig. 8), and it presents the bulbous contour met with in many examples of Form 44 (Figs. 1, 2).

Potters' marks occur stamped obliquely on the outside of the wall (Fig. 7 SVRDI M ; Fig. 8 GNATIVS). The specimen from York (Fig. 8) corresponds closely, both in dimensions and contour, with the Colchester bowl stamped MVXTVLLI M. This bowl (Form 81) may be assigned to the second half of the second century.

<sup>1</sup> Drexel, *Faimingen*, p. 77.



Both forms (44 and 81) were produced at Lezoux and in East Gaul. Imitations of Form 44 persisted into the third century, as in the bright-red bowl from Mainz (Fig. 11). Similar imitations—sometimes rouletted—also occur at Caerwent, Colchester, in a skeleton grave at Andernach, and in the rebuilt forts (c. 270 A.D.) at Köln Alteburg and Remagen (Pl. LXXXVI. 5).

Attention is drawn to Ludowici Sf (Fig. 9, a variant of Form 81), which is characterised by a thickened zone round the wall of the vessel, combined with a series of horizontal flutings so common in the Sigillata mortaria Curle 21 and Dragendorff 43 and 45.

Potters' marks are not frequent.

On Form 44 :	PATERCLINI OF	Lezoux (British Museum).
	PAVLLI M	" " "
	VITAL M	Rheinzabern "
On Form 81 :	GNATIVS	La Madeleine (?) (York).
	MVXTVLLI M	Lezoux (Colchester).
	PATERNVS F	" (Wroxeter).
	IVLI TALVSSANI	" "
	SECVND M	Les Allieux (London, British Museum).
	SVRDI M	probably SVRDILLVS of Lezoux or Martres de Veyre (Silchester).

No. 22.—LUDOWICI TYPES SMb and SMc. Pl. LXII.

Bowl with two horizontal flanges, an upper and a lower, the intervening space being decorated *en barbotine* with animals, birds or plant designs.

Although this bowl displays distinct affinities to Dragendorff Form 44, it differs in several important features, *e.g.* in its rim being generally devoid of a lip, in the presence of *two* horizontal flanges, and in the decoration *en barbotine* of the intervening wall space. The rim, which is somewhat thin and pointed, descends in an oblique curve to the upper of the two flanges. The vessel may be either bulbous (Figs. 1, 4) or hemispherical (Fig. 2) in contour.

It occurs at Niederbieber, and appears to have been chiefly manufactured at Rheinzabern (Figs. 1, 2) and Trèves (Fig. 6). Its chief incidence may be placed in the second half of the second century and the early part of the third century. It is no longer present in skeleton graves.<sup>1</sup>

An aberrant variety of this type, viz. Ludowici Sg (Pl. LXI Fig. 10), has a plain wall between two lateral flanges, and is furnished with a concealed cavity connected with the interior by a small aperture so as to form

<sup>1</sup> Oelmann, *Niederbieber*, p. 29.

a Tantalus cup—a device not unknown in modern times. If the cup is half filled with liquid, the action of tilting it to the lips causes the fluid to flow into the wall cavity, and thus the would-be recipient remains thirsty.

*No. 23.—DRAGENDORFF FORM 32. PL. LXIII.*

Dish with incurved rim, smooth rounded wall and flat or concave base.

The rim, which in the majority of examples is slightly incurved, is smooth and devoid of lip or of grooves. The foot-stand is broad and comparatively low, and generally exhibits a nearly rectangular section.

This form was manufactured at Lezoux, but it was pre-eminently a product of the potteries of East Gaul, more especially of Rheinzabern (where it is the commonest form of dish), and to a less extent of Heiligenberg and Trèves.

We may distinguish three types :

- (1) the shallow dish, Ludowici Ta (Fig. 7) ;
- (2) the smaller size, Ludowici Tp (Fig. 4), both with a flat base ; and
- (3) the deeper dish, Ludowici Sc, with a more distinctly concave base (Figs. 11 and 12).

It was the favourite dish in the forts of the German Limes, where it is extraordinarily abundant. It does not seem to have achieved so great a degree of popularity in Britain, perhaps due to the fact that Rheinzabern ware had considerable difficulty in competing with the products of Lezoux in this island.

Form 32 has not been recorded at Kastell Urspring (abandoned soon after 154 A.D.) nor in the Antonine occupation of Newstead, but it occurs amongst the Pan Rock Collection, which consists of Lezoux ware. At Niederbieber it is found throughout the whole occupation (190-260 A.D.), and it is occasionally met with in later graves at Andernach, and even in the Constantine period. Although this form originated about the middle of the second century, it is more especially abundant in the first half of the third century.

Potters' stamps are extremely common, and the following list of some of the more characteristic names, classified according to the main pottery centres, has been selected.

*Lezoux potters* (in some cases, *e.g.* PECVLIARIS, these may have worked also at Rheinzabern) : ALBVCIANVS, ATILIANVS (Pan Rock), AVSTRVS, CARATILLVS (Pan Rock), CASITTVS, CATIANVS, CATVSSA, CESORINVS, DOVEC-CVS, IVSTVS, LALLVS, LAVRVS, LVPPA, MALLIACVS, MASCELLIO, MATERNINVS, MATERNVS, PATERCLINVS, PATERNVS, PAVLIANVS, PAVLLVS (Pan Rock), PECVLIARIS, SACER, SACRAPVS, SACRILLVS (Pan Rock), SANVILLVS, SATVRNIVS, SEVERIANVS (Pan Rock), SOLINVS, TASGILLVS,

*Avocourt*: BOVDILVS, IASSCA, PRIMVS.

*Les Allieux*: SECVNDVS.

*Lavoye*: TOCCA, TOCCIVS.

*Ittenweiler*: CIBISVS.

*Heiligenberg*: ANISATVS, CESSORINVS,\* CIRIVNA, IBILIRVS, LVCANVS, MERCATOR, MINIVS, OCIOSO, PAVLLINVS, RVFINVS,\* SACIANTRI, SACRATVS, TOCCINVS, VALENTINVS, VENICARVS.

*Trèves*: AFER, Q. ALPINIVS, BETTA, BORIVS, CENSORINVS, CRICIRO, MAI-IAAVS, MAINIVS, MELVS, MINVSO, MINVTVS, TORDILO, VRBANVS.

*Sinzig and Remagen*: CACVNIVS.

*Kräherwald*: CAMVLATVS, DOMITIANVS, PASTOR.

*Westerndorf*: AVGVSTIO, AVRELIVS, LALLVS.

*Rheinzabern* (in some cases potters of the same name worked at Lezoux) : ABBO, AISTO, AMATOR, ATTILLVS, ATTO, AVETEDO, AVGVSTALIS, AVGVSTINVS, AVITVS, BELATVLLVS, BELSVS, CAPITOLINVS, CAPRASIVS, CATVLLVS, COMITIALIS, CONATIVS, COSTINVTVS, CVNISSA, DVBITATVS, FAVSTVS, FLORENTINVS, GEMELLVS, IANVARIVS,\* IMPETRATVS, IVCVNDVS,\* IVLIVS, IVVENIS, LATINIANVS, LVPVS, LVTAEVVS, LVTEVOS, MARCELLINVS, MARINVS, MARTINVS, NIVALIS, PACATVS,\* PEPPPO, PERPETVS, PRIMITIVOS, PRIMITIVS, PRIVATVS,\* PROBVVS, PVPVS, QVIETVS, QVINTILIANVS, REGALIS, REGINVS, SATVRIO, SECVNDINAVI, SEVERIANVS,\* SOLLEMNIS, STABILIS, STATVTVS, SVADVLLIVS, TEMPORINVS, VERVS, VICTOR, VICTORINVS, VIRILIS,\* VITALIS.\*

No. 24.—*LUDOWICI TYPES Ta', Tk, Tm', Tr, Ts, and Ty.*  
PL. LXIV.

Shallow dish or plate, with oblique wall, usually plain and without grooves.

This group, which comprises a number of Ludowici's types, is characteristic of the middle of the second century. It was made in a shallow form at Heiligenberg (Fig. 1), and is of rare occurrence in this pottery, but it is frequent at Rheinzabern, evincing a considerable degree of variation, yet with a strong family resemblance.

A single instance of grooving in the wall occurs in a shallow example from a grave at Xanten (Fig. 4). A somewhat deeper variety with a high foot-stand, occurring at Rheinzabern (Ludowici Ts, Fig. 8), shows a small step at the junction of the wall with the base, both internally and externally, and this is somewhat suggestive of its being a possible imitation, though discontinuous in point of time, of Form 18. On the other hand, a Belgic form in Terra Nigra, derived from Loeschcke Type 73, may yet furnish a developmental clue.

\* In the case of the names marked with a star, potters of the same name are known to have worked in South and Central Gaul (as the case may be), but at a period anterior to

the production of Form 32. It is possible that the occurrence of these names in East Gaulish potteries signifies a migration thither of the original firms,



This form is not found either at Newstead, Niederbieber, or in the Pan Rock Collection, and it is probable it possessed only a short life of a few decades in the middle of the second century. It does not appear to have been recorded in Britain.

Potters' stamps are not infrequent, especially on the varieties *Tr* and *Tk*, and are hitherto only recorded from Rheinzabern.

*Tk*: AMMO FE, CONSTANS F, LILLVS F, PRIVATVS, RESTVTVS. It is probable that the PRIVATVS who worked at Rheinzabern is identical with the potter of the same name who worked at Lezoux in the Trajan-Hadrian period.

*Tr*: AVITVS FEC (in grave with coin of Hadrian), CINTVGNATV, NIVALIS, REGINVS F, REGINVS (in grave with coin of Trajan), SEDVLVS (in grave with coin of Trajan), SVADVLLIVS F, VERVS FE, VICTORINVS.

*Ts*: LVTAEVS.

*Ty*: BITVNVS.

No. 25.—*LUDOWICI TYPES Tf, Ti', Tk', Tn'*. PL. LXV.

Shallow dish with outwardly projecting ridge or reduced flange.

Under this heading we include four of Ludowici's types which show a close affinity. They may be divided into two classes:

(a) Those with an upright rim forming an angular junction with the wall of the vessel (Figs. 1, 2).

(b) Those in which the wall of the vessel is continuously rounded internally (Figs. 4-7).

The influence of the flanged Sigillata forms 38 and 44 upon the evolution of this type of dish must not be overlooked. Thus at Heiligenberg Forrer's Type 11 is merely a Form 38 in which the flange has become reduced to a projecting ridge.

On the other hand, the dishes with a continuously rounded contour are obviously flanged varieties of Form 32 (Figs. 6, 7). Furthermore, Ludowici's *Tk'* (Fig. 2) displays much affinity to the deeper wall-sided Sigillata-mortarium Drag. 45 (*q.v.*).

Briefly, the following varieties may be enumerated:

(1) *Ludowici Ti'* (Fig. 1), in which the rim meets the wall at a wide angle, the junction being marked externally by a projecting ridge and internally by a line. A rather large example in the Strasbourg Museum (Fig. 3) has a striated rim and a groove beneath the ridge.

(2) *Ludowici Tk'* (Fig. 2) is apparently a simplified variety, the ridge being incorporated in the thickened upright rim; thus it recalls the so-called wall-sided Sigillata-mortarium (Drag. 45).

(3) *Ludowici Tf* (Figs. 6, 7) is (as already noted) a flanged variant of the common contemporary form, Drag. 32. At Niederbieber (190-260 A.D.) the rim is either plain (Oelmann Type 6 A) or ornamented *en barbotine* (Fig. 6). In Fig. 6 the slight incurving of the rim emphasises the general resemblance in shape to Form 32. It is obviously the same type of vessel as *Ludowici Tf* (Fig. 7), which is also decorated *en barbotine*, and is stamped AISTVS FECIT, in a circular impression, the name of a potter who also made Form 32.

(4) *Ludowici Tn'* (Fig. 4) is furnished with a distinct lip. A small and debased variant of this type (Fig. 5) found in the Trèves pottery is probably of third century date. It occurs in a third-fourth century Trèves grave-group (No. 634).

The period of this dish (in all its varieties) may be assigned to the later years of the second century and the first half of the third century. At Niederbieber it is found throughout the period of occupation (190-260 A.D.).

It appears to be, with rare exceptions, of East Gaulish origin. This form is sparsely represented in Britain, but an example of *Ludowici Tn'* is represented in the Guildhall Museum <sup>1</sup> (Pudding Pan Collection).

Imitations of this dish in coarse red ware (Fig. 8), with vertical rim and lip, attained a considerable vogue in the fourth century; and Koenen <sup>2</sup> states that they are to be found in every cemetery of the Constantines and their successors. Very similar forms in coarse ware have been found at Huntcliff (end of fourth century); see the section dealing with Drag. 45 (Pl. LXXIV. 8).

Potters' stamps are rare, but the following Rheinzabern potters have been recorded:

Tf: AISTVS FECIT Rheinzabern, MARCELLIN F Jagsthausen, VERVS FEC Rheinzabern.

Ti': VICTORINVS F Rheinzabern.

Tk': AMMO FE, CONSTANS F, LILLVS F, PRIVATVS, RESTVTVS, all at Rheinzabern.

#### No. 26.—MISCELLANEOUS FLAT PLATTERS. Pl. LXVI.

In this category several forms are placed which do not display characteristics of distinct affinity with the previous groups of platters.

Fig. 1, *Ludowici Tc'* from Rheinzabern, may be allied to the larger dish Tg, especially in respect of its flat rim, and it is possible it may be more nearly related to the rather flat Belgic platters with pendent lip.

In Fig. 2, from Colchester, the flatness of the platter is so pronounced that it would appear to have functioned as a stand for a vessel rather than as a dish or plate; Fig. 4, from Silchester, is a simplified example of the same type.

<sup>1</sup> *Proc. Soc. Antiq.* 2nd Series, xxi. p. 288.

<sup>2</sup> *Gefässkunde*, p. 112.

In Fig. 3, from Wroxeter, the lip is oblique, and the platter recalls a dwarfed and flattened specimen of Ludowici Tk', but without the projecting flange of the latter. The foot-stand is high in proportion to the flatness of the base.

Ludowici Th' (Fig. 5) is a large shallow platter with a thick rectangular foot-stand and a rim that is flattened externally. It recalls the Augustan platter Loeschke 72 Bb, and has probably been evolved through an intermediate Belgic plate. It is a late form, and somewhat similar large platters, with, however, slightly inturned rims, occur in Trèves grave-groups of the third and fourth centuries (No. 273, 335, 369, 881).

No potters' marks have as yet been recorded in this group.

No. 27.—*MISCELLANEOUS PLATTERS AND BOWLS.* PL. LXVII.

In this plate Figs. 1 and 2 (Ludowici Ti and Td) may perhaps be regarded as degenerate and simplified derivatives of Curle 15, *q.v.* They are Rheinzabern ware, and may be assigned to the middle of the second century. Fig. 1 is stamped VICTORINVS F and Fig. 2 DONATVS F. On the latter type (Ludowici Td) the stamp FLORENTINVS FECIT has also been recorded from Rheinzabern.

Fig. 3 (Ludowici Td') shows affinities to the plain variety of Form 36. It was found in a Rheinzabern grave, and belongs probably to the second century.

Figs. 5-7 illustrate varying types of a small shallow bowl with recurved lip (as in Form 35) but without a foot-stand. Figs. 5 and 6 are from Niederbieber, and are assigned to the third century. They also occur in Trèves grave-groups (342, 368 and 740) dated to the third and fourth centuries. The type still occurs in a skeleton grave at Remagen. It has likewise been recorded at Rheinzabern, Ludowici Sd, Fig. 7.

A still simpler form with a moulding in place of an overhanging lip is represented by Ludowici Te' (Fig. 4).

Finally, a small but deep bowl with thick base and moulded lip, Ludowici Sn, is typical of the third century. It may perhaps be a coarse derivative of Form 40, and is found at Rheinzabern (Fig. 8) and at Niederbieber (Fig. 9). Potters' stamps are not known on any of these bowls.

No. 28.—*INK POTS.* PL. LXX.

Examples of inkpots in Sigillata technique occur throughout the period of manufacture of this fabric. The Sigillata inkpots doubtless owed their inception to similar vessels in bronze<sup>1</sup> and probably even to specimens in blue *faïence* from Egypt. An inkpot in Sigillata ware has been found at

<sup>1</sup> See five examples in bronze in the Guildhall Museum, Ward, *Roman Era in Britain*, Fig. 64<sub>D</sub>.



Priene in Asia Minor, and at Haltern it occurs in Italian fabric (Fig. 2), but on this site this vessel is more plentiful in red clay coated with a brown varnish (Fig. 1, Loeschcke Type 38). At Hofheim the contracted mouth differs from its Augustan Sigillata prototype in being furnished with an internal collar or flange, which descends obliquely into the body of the vessel (Fig. 3) and forms a very practical device to prevent the ink from splashing. A similar arrangement is seen in the vessel from Long Lawford (Fig. 5), and in fragmentary examples found at Margidunum. In the Rheinzabern inkpot (Fig. 6) the rudiments of this flange still exist, whilst in the third-century footless specimen from Niederbieber (Fig. 7) it is altogether wanting.

Attention is directed to the decorated Sigillata inkpot with a handle now in the Albertin Museum, Dresden (Fig. 8).

Potters' marks are not known on these vessels.

### SIGILLATA VESSELS OF THE MORTARIUM TYPE.

Allusion has already been made incidentally to the mutual and interpenetrating influence of "coarse ware" upon Sigillata forms, and of Sigillata upon the forms of coarse ware. In the following subsection a series of Sigillata forms are described, bearing a more or less close relationship to Mortarium types, approximately contemporary in date. When we bear in mind that Sigillata potters also manufactured Mortaria (*vide infra*), the existence of an inter-influence of this nature is not at all surprising.

#### No. 29.—(a) RITTERLING TYPE 12. PL. LXXI. 1-8.

Wide bowl with horizontal plain flange and spout.

The wall is approximately hemispherical and of low curvature, and the base is sometimes slightly thickened in the centre but is not stamped.

The foot-stand is broad and almost rectangular in section in many of the larger examples (Figs. 1, 3), but is more triangular in some of the smaller bowls (Fig. 2).

The flange, with relatively slight variations, is placed horizontally to the body and is devoid of any decoration (Figs. 1-9). In the type-form it presents a nearly triangular section, its outer edge terminating in a more or less fine point, whilst its base projects into the body of the vessel in the form of a substantial rounded ridge or moulding.

The internal moulding or ridge is continued upwards to form a semi-circular rim or lip, which is delimited externally by the flange. This lip is sometimes demarcated internally by a groove (Fig. 7), and it is usually interrupted at one point of its circumference for the formation of a spout in such a manner that the lip forms the sides of the triangular spout (Figs. 1 and 2).

This type is plentiful in the Claudian period at Hofheim, and is also represented in the Vespasianic occupation of this fort, varying considerably in size. At Aislingen it is not infrequent, and is assigned by Knorr to the reigns of Claudius and Nero. It is represented in Britain at Colchester, Silchester, and other southern sites. At Leicester several examples have been found of the form with the truly horizontal, undecorated flange, but it does not appear to have been recorded further north than Margidunum (Fig. 7).

Apparently it did not survive the first century. A fragment found at Newstead (Fig. 9) presents the curved flange of the later development of this type and of contemporary Mortaria.

Belgic imitations of this form are not uncommon (Figs. 20, 21), and they appear to have completely supplanted the Sigillata vessel in the Trajan-Hadrian period.

No Augustan prototype has been found in Sigillata technique.

Its evolution is to be traced back to the Mortarium with horizontal rim, introduced into Gaul and Germany from Italy, as early at any rate as the reign of Augustus.<sup>1</sup> It is highly probable that the early Sigillata potters of South Gaul adopted this form and transmuted it into the finer technique of Type 12. In support of this explanation it may be pointed out that there can be little doubt that many of the Sigillata potters of South Gaul, and indeed others of later date, also manufactured Mortaria.<sup>2</sup> A few instances of the production of both Sigillata vessels and Mortaria by potters bearing the same names may be appended here, *e.g.* ALBINVS, MATVGENVS, MARITIMVS, MELVS, PATERNVS, REGENVS, SACIRO, SARRVS, SATTO, SECVNDVS, VRAPPVS (also on amphorae), VERECVNDVS, VICTOR, VIRILIS.

Ritterling's Type 12 was also produced in "marbled" technique (May, *Silchester*, Pl. XXXIX. 4).

#### No. 29 A.—(b) CURLE TYPE II. PL. LXXI. 10-14.

Wide bowl with horizontal, decorated flange and occasionally with a spout.

This form is obviously a further development of the preceding type, from which it is chiefly to be distinguished by the decoration of the upper surface of the flange *en barbotine*, in the form of conventional ivy leaves or other designs. The flange generally also possesses a slight downward curve at its outer edge (Figs. 10, 11, 12, 14)—a common characteristic of late first-century Mortaria and indeed of some in the early part of the second century. The flange is thus no longer triangular in section.

In general, also, the upright rim or lip has slightly increased in height and its section has ceased to be semicircular. It follows that the flange is

<sup>1</sup> Loeschcke, *Hallern*, p. 244.

<sup>2</sup> Cf. Déch. i. p. 88 IIIJ105.

now attached to the wall of the vessel at a relatively lower level. Furthermore, a general increase in the thickness of the vessels becomes noticeable.

Barbotine decoration (evidently in imitation of a form of decoration in beaten silver) is found to occur on unglazed ware early in the first century, but this technique does not appear to have been practised by the Sigillata potters of South Gaul until the reign of Nero,<sup>1</sup> when it becomes fairly common on the rim of the cup Drag. 35, as found in the pre-Flavian Legionary Camp at Novesium and in the Wiesbaden peat layer. Judging therefore by analogy, it would appear that the decoration of the flange, as found in Curle's Type 11, first occurred in the reign of Nero.

The Wroxeter example (Fig. 13) is clearly transitional between the two types, *i.e.* Ritterling 12 and Curle 11.

Type 11 is especially characteristic of the Flavian period, and is comparatively frequent at Rottweil, London, Wroxeter, Silchester (Fig. 12), Chester, Margidunum (Fig. 11), Carlisle, Corbridge, and in the first period at Newstead (Fig. 10). With slight variations, it persisted into the reign of Trajan, as at Pfünz (Fig. 14).

*No. 29 B.—(c) WIDE BOWL WITH CURVED, DECORATED  
FLANGE. PL. LXXI. 15-19.*

The further development of this bowl (Curle Type 11) in the Trajan-Hadrian period is illustrated by examples from Silchester (Fig. 18), York (Fig. 19), and Gellygaer (Fig. 15). They show a definite and further increase in the height of the rim or lip and in the curve of the decorated flange, and indicate a near relationship to the later form Drag. 38, especially noticeable in the Silchester specimen (Fig. 18).

*No. 30.—DRAGENDORFF FORM 38. PL. LXXII.*

Hemispherical bowl with high rim and curved, overhanging flange.

The development of this typical second-century form can be traced continuously from Ritterling's Type 12 downward through the forms figured by Curle (Type 11), Ward, and May. It differs from these forms in the greater height of its rim and in the more pronounced curve of its overhanging flange. Naturally it resembles most closely the late type, as figured by Ward and May (Pl. LXXI. Figs. 15, 18, 19), but it differs not only in its coarser texture and poorer glaze, but also in the absence of barbotine decoration on the flange.

The rim, perhaps more especially in the earlier examples, is frequently provided with a lip or moulding (Figs. 1-7, 9): in the later forms the lip is

<sup>1</sup> This technique had already been practised by some makers of Italian "Megarian" bowls, as *e.g.* C. Popilius, who signed his name *en barbotine*. A Sigillata vessel of Italic char-

acter (Walters, *C.R.P.* L. 52) indicates that this practice was not unknown at Arretium and its *officinæ*.



usually absent, but it is still present in the Pan Rock type of the middle and second half of the second century (Fig. 7).

The flange varies considerably in breadth, and is either bevelled (Figs. 5-7, 9, 11, 13) or (more typically) rounded. It may be greatly reduced (*e.g.* Fig. 5) so as to form an easy transition to Form 44, in which it is merely a projecting ridge.

The base is concave internally, and the foot-stand approximates to a rectangular profile in section, but frequently it shows a moulded outer edge, recalling the foot of Form 37 (Figs. 2, 6, 7, 11).

Not infrequently the interior is roughened and the glaze worn, and in some instances it is even provided with particles of grit, as in the Sigillata-Mortarium Dragendorff 45, thus demonstrating that this vessel was sometimes put to the same uses as a Mortarium.

The evolved type belongs essentially to the middle and especially to the second half of the second century, continuing into the third century. It was made at Heiligenberg, presumably in the Hadrianic period (Figs. 5, 8), both with and without a moulded rim. It is frequent in the Antonine period (manufactured mostly at Lezoux), when it occurs in the second occupation of Newstead (Fig. 1) and at Rheinzabern (Figs. 10 and 13).

To the middle of the second century we must also assign the Silchester bowl (from Lezoux) with the stamp ALBVCI OF (Fig. 2).

It is not represented at Gellygaer or Wiesbaden Kastell, both of which sites may be assigned to the period Domitian-Trajan.

At Niederbieber (190-260 A.D.) it is attributed to the entire period of occupation. Here, in all the examples, the rim is obliquely out-set (Fig. 12), but perhaps this form should rather be classed with the more definitely Mortarium type, Dragendorff 43, *q.v.*

The bowl has been found in a skeleton-grave at Vermand (*c.* 276-400 A.D.). Its near homologue in Mortarium technique is not uncommon during the latter half of the Roman occupation of Britain (see Bushe-Foxe, *Wroxeter I.* Figs. 126-62).

Just as the earliest Sigillata Mortarium type (Ritterling 12) was imitated in Belgic technique in the early part of the second century, so also we find Drag. 38 copied in *terra nigra* (Strasbourg Museum) in the second century, and in coarser ware during the third and fourth centuries. These later imitations are usually composed of buff, red, or even white clay coated with red slip (Figs. 14, 15), and sometimes display a painted pattern on the flange (Fig. 15). They are found as late as the end of the fourth century, *e.g.* at Huntcliff (370-395 A.D.), (Figs. 16 and 17).

Potters' stamps are fairly frequent, and the following (mostly of Lezoux potters) have been recorded :

*Lezoux potters* : BELINICCI M (Wroxeter), BRICCI M (Silchester), BVTTVRRRI (Wroxeter), CARVSSA (Wroxeter), CATIANI M (Wroxeter), CORISILLI (Carlisle), COSMINI M (Corbridge), CROBISO (Corbridge), DOCCIVS[ (Corbridge), DOECCVS

M (Astwick), DONNAVC F (Wroxeter), ELVILLI (Leicester), GEMINI MA (Corbridge), GLIV (Silchester), HABILIS F (Wroxeter), ILLIANI M (Silchester), IVLLINI M (Pan Rock), LALLI MA (London, Guildhall), MACCALI M (Pan Rock, London, Guildhall; Pas de Calais), MACCIRRA M (Corbridge), MARITVMI MA (Corbridge), MRITVMI[ (Wroxeter), MARITIM (Chesters), MARIT[ (Wroxeter), METTI M (Corbridge), MOSSI M (Corbridge), MVSICI M (London, Guildhall), MVXTVLLI M (Wroxeter), NAMILIANI (Wroxeter), Iul] NVMIDI (Wroxeter), PATERCLOS F (London, Catalogue of Lond. Antiq. 104, R. Smith), PINNA FE (Cirencester), PVGNI MA (London, Guildhall), SACRAPV F (London, Guildhall), SEVERIANI MA (Silchester), SEVERIN M (Corbridge), SEXTI MA (Pan Rock), TASSCA FE (Corbridge), TITVRONIS OF (Corbridge), TITVRONIS (Corbridge).

*East Gaulish potter*: COMOS (Corbridge).

*Heiligenberg potters*: CINTVGNATV (Zugmantel), SECVNDINVS FI (Heiligenberg, Vindonissa, Fig. 8).

*Ittenweiler potters*: PROBVS (Mainz), VERECVND F (Ittenweiler).

*Rheinzabern potters*: CINTVSMVS F (Wroxeter), DECMINVS (Rheinzabern, Zugmantel), LIBERALIS (London, Guildhall), LVCINVS F (Rheinzabern, Fig. 10), MARCELLVS F (Silchester), MARTIA F (Okarben), VERINVS F (Rheinzabern), VIRILIS F (Rheinzabern).

No. 31.—*CURLE TYPE 21 AND DRAGENDORFF FORM 43.*  
PL. LXXIII.

(a) *Curle Type 21.*

Bowl with horizontally fluted wall, curved flange, and short rim, constricted and delimited internally by a groove.

This Sigillata vessel closely resembles many Mortaria of the contemporary period, viz. the second half of the second century. It is, however, not studded with grit. The type has been found at Newstead in the Antonine period (Fig. 1), at Silchester (Fig. 4), Lincoln, Margidunum, Corbridge, and Pfünz (Figs. 2, 3).

Most of the examples are somewhat heavy and thick, with a poor glaze.

In the Silchester vessel the edge of the flange is already bent vertically downwards, forming a transitional stage to Dragendorff 43 (*q.v.*), in which the vertical portion has become greatly exaggerated.

Evolution in another direction is indicated by a Sigillata Mortarium from Margidunum (Fig. 11) with poor glaze, probably of the late second to third centuries, in which the flange is still horizontal with a downwardly pointed edge: the close affinity is indicated by the delimitation of the rim internally by a groove and by its internal projection. A very similar Mortarium in blue-grey ware, coated with crimson slip, evidently in imitation of Sigillata, occurs at Silchester (Fig. 10).

## No. 31 A.—DRAGENDORFF FORM 43. PL. LXXIII.

(b) Mortarium with wide, vertically down-turned flange and projecting spout.

This Sigillata vessel chiefly belongs to the second half of the second century, and probably disappeared early in the third century.

It is not represented at Kastell Urspring, abandoned c. 154 A.D., or in the Antonine period at Newstead, nor does it occur in the potteries of Heiligenberg or Trèves. As a Rheinzabern product (Figs. 5-7) it is comparatively frequent, and fine specimens are exhibited in the Strasbourg Museum.

It is found at Niederbieber (190-260 A.D.), where it is assigned to the earlier part of the occupation (Fig. 8).

The flange may be plain or decorated *en barbotine*.

The wall is frequently fluted externally, as in the preceding type.

The spout projects freely outwards from the flange. The interior is roughened by particles of grit, as in typical Mortaria.

As already indicated, this bowl shows a strong affinity to Curle Type 21. In both vessels the rim projects internally and is constricted by a groove, both are usually furnished with horizontal external flutings, and occasionally (as in the Silchester example, Fig. 4) the flange of the somewhat earlier type (Curle 21) displays a decided vertical tendency.

Bowls with a vertical flange had already appeared in the late first or early second century.

An example from Silchester (Fig. 9) of a mica-coated vessel of Belgic type (probably Trèves ware) is figured in order to show the very similar vertical disposition of the flange, and it is possible that such bowls may have exercised a determining influence on the evolution of Form 43.

A similar bowl, coated with golden mica, with deeply turned down flange, occurs at Heddernheim (Wolff, *Hedd. Mitt.* iv. Pl. XII. 34).

Consideration should also be directed to the possible influence upon this type of a Mortarium with overhanging flange, examples of which occur as early as the pre-Flavian Legionary Camp at Novæsium, the earth-fort at Hofheim, and the Flavian occupation at Corbridge (Fig. 12). At all these sites the stamp of one of the *Atisii* family of potters is found on this type of Mortarium.

Potters' stamps are rare, but VIRILIS F (the Rheinzabern potter) has been recorded on Dragendorff 43.

Evidence indicating the continuity of developmental influence appears to be forthcoming in the internal projection of the rim which is common to the types Ritterling 12, Curle 11, Curle 21, and Dragendorff 43.



*No. 32.—DRAGENDORFF FORM 45. Pl. LXXIV.*

Deversorium or bowl with upright (collar) rim—wall-sided Mortarium—and with an *appliqué* lion-faced spout.

The upright or collar rim is usually prolonged downwards beyond its junction with the body of the vessel, thus forming a markedly undercut projection.

The lower part of the wall or body generally displays two or more horizontal flutings, but these are not so numerous as in the two preceding types (Curle 21 and Dragendorff 43).

In general the interior is studded with particles of grit.

This form was manufactured at both the Central and East Gaulish potteries. In the Trèves pottery it occurs without the characteristic lion's head (Fig. 5): an example of this type has been found at Housesteads.

It is not represented in the Antonine period of Newstead, but at Niederbieber (Fig. 4) it is extraordinarily abundant. Its incidence lies in the latter part of the second century and especially in the first half of the third century, and it has even been found as late as in a skeleton-grave at Vermand (276-400 A.D.).

The stamp of the Lezoux potter GEMINVS frequently occurs on this vessel, as at London, Silchester, Colchester, York, Corbridge, Paris, and Etaples (Figs. 1 and 3).

The close relationship existing between certain Sigillata types and contemporary Mortaria and coarse ware forms is particularly evident in this vessel. It has already been pointed out that in the Sigillata Mortarium Form 38, some tentative efforts were made to roughen the interior of the vessel. In Form 45 this "Mortarium technique" was more wholeheartedly adopted.

The appearance of the "collar-rimmed" or wall-sided Mortarium, Fig. 6 (dated in a Corbridge example to the junction of the second and third centuries), took place contemporaneously with the Sigillata form—whether as a prototype or as an imitation it is difficult to say.

As in the case of Form 38, so also in that of Form 45, its homologues in Mortarium and coarse ware types outlived the Sigillata product. Colour-coated instances are not uncommon in the fourth century, as at Huntcliff (Fig. 8). The specimen (coated with red slip) from Silchester (Fig. 7) is probably of third to fourth-century date. Both, however, lack the lion-faced spout of the Sigillata product.

It may be noted that moulds for making the lion heads were found at Lezoux. Interesting variants of this *appliqué* technique occur at Lyons and York (Pl. LXXXIV. 6, 7).

Potters' marks are not infrequent: all the following are from Lezoux with the exception of the Rheinzabern potter IVENTINVS:

CAVPIRIV FECI	(London, Brit. Mus.).
GEMENI M	(Colchester).
GEMINI MA	(London (Guildhall), Silchester, Paris).
GEMINI M	(York, Colchester, Etaples (in the sea)).
GEMINI	(London, Brit. Mus.).
GEMIN M	(Silchester).
M P GEMINI M	(Colchester).
M F GEMIN M	(Corbridge).
IVLICCI M	(London, Bethnal Green).
IVVENTINVS	(Wetzheim).
SOLINI OF	(London, Guildhall).

The later examples, *e.g.* those from Niederbieber, do not appear to have been stamped, and may have been manufactured at Trèves.

On Pls. LXVIII. and LXIX. we illustrate some unusual examples of plain forms as well as many variants of those already described.

## CHAPTER IX

### MISCELLANEOUS SIGILLATA FABRICS

#### (i) *MARBLED SIGILLATA*.

THIS variant of the normal Sigillata products of South Gaul was manufactured more particularly at La Graufesenque in the first century of our era. It is characterised by a coating of fine yellow glaze traversed by veins of a red colour, probably in imitation of marble or agate, or of variegated glass, *e.g.* the *vasa murrina* or *millefiori* glass. The paste of which this fabric is composed is exactly similar to that of the usual red-glazed Sigillata, and the prevalent South Gaulish Sigillata forms were reproduced in this technique, all belonging to first-century types.

This practice is obviously derived from Italian sources, for already as early as the late Augustan period we find examples of marbled Arretine ware, *e.g.* the cup Loeschcke Type 8 (Pl. XXVIII. 1) by the potter ATTIVS (ATTI), whose stamps also occur at Haltern (Loeschcke Nos. 117 and 118), and the thin-walled cylindrical bowl, which is of the same form as the Haltern Type 16 (Pl. XXIII. 12).

Both these vessels are described as being "coated both externally and internally with a yellowish ground colour, marbled on the outside with close-set streaks of red colour, and with a fine glaze."<sup>1</sup> They were found in a pit of the legionary fortress on the Kästrich in Mainz, together with the ATEIVS crater decorated with storks (Pl. II. 3) and other vessels of the Augustan period.

In South Gaulish specimens the lemon-yellow ground is more pronounced than in the Arretine examples, and according to Schumacher (*loc. cit.*) the red veining is obtained by the removal of the yellow colour (perhaps by a brush or feather), thus allowing the original colour of the pottery to be visible. This technique is in marked contrast to the "mottling" of the early second-century non-Sigillata wares of the Wetterau, in which the red colour was dabbed upon the yellow coating, apparently with a sponge. These later wares have been figured and described by Schumacher together with the marbled wares, *sensu stricto*, of the first century. A sharp dis-

<sup>1</sup> Schumacher, *Altortümer uns. heidn. Vorzeit*, v. p. 248 sqq. Taf. 45.



inction, however, must be drawn between these two categories in order to avoid confusion, and we would suggest that the term "marbled" should be restricted to the first-century Sigillata wares, and the term "mottled" to the so-called marbled ware of the second century made in Germany.

The following provincial Sigillata forms in marbled technique have been recorded :

- |            |       |  |
|------------|-------|--|
| Drag.      | 29    | Pompeii, pre-Flavian type of decoration (Atkinson, <i>op. cit.</i> p. 28 ; Pl. XXVIII. 11).  |
| „          | 30    | Mannheim Mus., CALVS F, Nero-Vespasian type of decoration (Pl. XXVIII. 9), Knorr, <i>Terra Sigillata</i> , 1919, Pl. 17, pp. 34, 35.                             |
| „          | 16    | Silchester, fragment of rim.<br>Trèves, BOLLVS FIC.  |
| „          | 15/17 | Arles, Walters, <i>C.R.P.</i> M 126, OF]IIA[R]DA/ = ARDANVS<br>Trèves, BOLLVS FIC.   |
| „          | 24/25 | Arles, Walters, <i>op. cit.</i> M 125.<br>London, Walters, <i>op. cit.</i> M 2378.<br>London, Guildhall, PONTI O.<br>London, Guildhall, MANERTVS.<br>Margidunum. |
| „          | 27    | Trèves, four specimens, one PRIMI.<br>Frankfort Mus., illegible stamp.   |
| „          | 18    | Silchester, OFI ARDAC.<br>Leicester, OF MAPOMI.<br>Frankfort Mus. OF PRIMI.  |
| „          | 35    | Arles, Walters, <i>op. cit.</i> M 127.   |
| „          | 36    | Mainz.   |
| Ritterling | 8     | Bordighera, Walters, <i>op. cit.</i> M 124 CAS[TVS].<br>Trèves, illegible stamp.   |
| „          | 12    | Silchester.  |

We have failed to find any record of Form 37 ; of the two decorated vases of marbled ware at Pompeii mentioned by Dragendorff (*Bonn. Jahrb.* xcvi. p. 98), one is doubtless the Form 29 described by Atkinson. If, in the light of further evidence, the absence of Form 37 is confirmed, a point of considerable chronological significance will have been established.

The potters, whose stamps have been recorded in association with this ware, are the following :

- |         |                       |
|---------|-----------------------|
| APER    | Naples APRIA = APRIM. |
| ARDACVS | Silchester.           |
| ARDANVS | Arles.                |
| BIO     | Pompeii.              |

BOLLVS	Trèves.
CALVS <sup>1</sup>	Mannheim.
CASTVS	Bordighera CAS[TVS] ; Cagliari CASTVS FE.
CELEROS <sup>2</sup>	Arles ; Rome, now at Heidelberg.
FELICENTE <sup>2</sup>	Arles.
MANERTVS <sup>1</sup>	London.
MAPOMVS	Leicester OF MAPOMI (cf. Déch., i. p. 84 OF MAPONI).
PONTVS	London.
PRIMVS	Pompeii OF PRIMI, OF PRIMV. Trèves PRIMI. Frankfort OF PRIMI.
SILVANVS	Arles SILVAN.
VITALIS	Arles OF VTIALI.

The results of an analysis of the life-history of these potters may thus be summarised :

- (a) ARDACVS, ARDANVS, BIO and CELER had probably ceased work before the advent of the Flavian period.
- (b) APER, BOLLVS, CASTVS, FELIX, PRIMVS, SILVANVS and VITALIS were already active in one or other or both of the reigns of Claudius and Nero.
- (c) CALVS is difficult to date, but his decoration is of Nero-Vespasian type.
- (d) MANERTVS and MAPOMVS or MAPONVS are both South Gaulish potters ; they are not recorded on Flavian sites.
- (e) PONTVS appears to be the only potter whose activity may be said with some certainty to have been chiefly centred in the Flavian period.

On the other hand, we find in this ware no stamps of the earliest or Tiberian potters, such as BILICATVS, SCOTTIVS or SENICIO, but this negative evidence may be nullified at any time by future discoveries.

In the present state of our knowledge we may therefore assign the manufacture of this fabric to the reigns of Claudius, Nero and Vespasian. It is particularly characteristic of the period Claudius-Nero.

Marbled Sigillata occurs only sporadically in Britain, but specimens have been found on southern sites, such as London, Silchester and Colchester, and even as far north as Leicester and Margidunum. In Britain it has not been recorded on sites which were first occupied in the Flavian period.

As already indicated, a careful distinction should be drawn between marbled Sigillata and the imitations of marbled fabric in non-Sigillata

<sup>1</sup> Calus made vessels of Form 30 (Déchelette, i. 258, 259) ; 27 (Geissner, No. 85) ; 24/25 (May, *Silchester*, p. 210) and 33 (Walters, *op. cit.* M 2062). The stamp of Manertus occurs on an early Form 18. (Fritsch, *Riegel*, p. 35.)

<sup>2</sup> Probably a play on the names of the potters *Celer* and *Felix*, but the Gaulish termination -os is not uncommon as a variant for the Latin -us, e.g. Baccos, Cobnertos, Cottos for Baccus, Cobnertus, Cottus, etc.

ware. Already in the Claudian period (Ritterling, *Hofheim*, p. 271 *sqq.* Types 42 and 48) attempts had been made to transfer this technique from Sigillata to non-Sigillata fabric.

In the Domitian-Hadrian period imitation marbled ware—"red mottled ware"—was produced in considerable quantities in the potteries of the Wetterau,<sup>1</sup> and is found particularly in the forts of this district, viz. Heddernheim, Okarben, Heldenbergen, Kesselstadt and Friedberg.

A later development of this imitation-technique is exemplified by the brown marbled fabric of "tiger" type, so plentifully represented at Niederbieber in the third century (Oelmann, *Niederbieber*, p. 45 *sqq.*) and in Trèves grave-groups of the third and fourth centuries (Nos. 342, 263 B, 335, 368).

Whilst the true marbled Sigillata is represented only in prevalent Sigillata forms, the later imitation-ware is found in a great variety of shapes, more especially in forms of jugs.

## (ii) SIGILLATA VESSELS DECORATED WITH ROULETTING.

PLS. LXXV. LXXVI.

Although rouletting was frequent in Arretine ware, and was continued on early Gaulish Sigillata forms, such as Drag. 24/25 and 29, the practice of supplanting the relief-ornament of decorated vessels by rouletting, and of decorating plain forms in this manner, did not become prevalent until the second and third centuries.

In the majority of examples a distinct difference in technique is evident, *i.e.* the rouletting is coarser and deeper, and, in general, each notch is of the conventional diamond shape, but much compressed and attenuated; thus: /

The shapes of the vessels displaying this decoration are commonly those of extant, contemporary Sigillata forms, and for this reason we have deemed it advisable to group them together under one heading.

Two sources of development can be definitely traced: (a) Its continuity with the technique of Italian and early South Gaulish ware is demonstrated by the tentative appearance of *notched* rouletting on the rims of some Flavian examples of Form 29 (Pl. LXXV. 4 A). (b) The practice of rouletting varnished and coarse ware, frequently found throughout the first century, probably exerted an equally important influence; and a connecting-link between its application to non-Sigillata and Sigillata types is forthcoming in a bowl, coloured a red-brown, which was found in a pit beneath the Imperial Palace at Trèves (dated to about 100 A.D.).<sup>2</sup>

<sup>1</sup> Schumacher, *Altertümer uns. heidn. Vorzeit*, v. p. 248 *sqq.* Taf. 45; and G. Wolff, *Töpfereien in der Wetterau*, Westd. Zeitschr.

<sup>2</sup> Rouletting of the rims and walls of coarse-ware vessels of the same contour as Forms 29,

30 and 37 had already appeared in the Domitian-Trajan period (Bushe-Fox, *Wroxeter I.* Figs. 7, 9, 11, 12, 13). A carinated bowl of light brown ware, with rouletting on the upper frieze, has been found in a well, dated to the first century, at Margidunum.



Oelmann (*Niederbieber*, p. 24) has pointed out that this technique was applied to Sigillata vessels in the reign of Hadrian, for bowls with coarse rouletting have been found beneath the wall of the *Schlitz-Kastell* of Saalburg.

But the fragment of a small cylindrical vessel, Form 30, found at Margidunum (Pl. LXXVI. 2), with somewhat fine rouletting and a well-marked fluting above the decoration, cannot be later than the "turn" of the first and second centuries.

To this date we must assign the commencement of the occasional practice of supplanting the relief-ornament of decorated Sigillata bowls or of superseding the plain surface of undecorated Sigillata vessels by rouletting.<sup>1</sup>

This technique, as applied to Sigillata vessels, continued into the third century, but is only of rare occurrence in the Constantine period, when rouletting was displaced by chequered decoration.

On our plates examples of Form 67 (Pl. LXXVI. 7), Form 30 (Pls. LXXV. 8, 13-17; LXXVI. 2, 3), Form 37 (Pls. LXXV. 1, 2, 4-6, 9; LXXVI. 1), and Form 33 (Pl. LXXV. 11) are illustrated together with hybrid vessels displaying the combined influence of Forms 31 and 37 (Pl. LXXV. 10, 12) and a bowl of the wall-sided mortarium type (Pl. LXXVI. 5).

This technique is especially characteristic of the East Gaulish potteries. At Heiligenberg it is particularly frequent and may, in the main, be assigned to the reign of Hadrian. Two forms from this pottery are illustrated, viz. Drag. 30 (Pl. LXXV. 15, 16) and Drag. 37 (Pl. LXXV. 1). Rouletted decoration was also practised at Rheinzabern (Pl. LXXV. 6, 9, 10; Pl. LXXVI. 1), and may here be assigned to the middle and second half of the second century.

Since this ware occurs at Niederbieber (Pl. LXXV. 4, 12), where Sigillata from the Trèves potteries predominates, it appears probable that the examples figured were derived from this source (see also Pl. LXXVI. 6 and Fölzer, Pl. XI. 22).

A further brief reference to the illustrations under the heading of Forms is made as follows:

#### *Form 30.*

The cylindrical cups from Heiligenberg (Pl. LXXV. 15, 16) are evident copies of this form, as demonstrated by the rounded base above the footstand and other features. They are, however, smaller and narrower than the usual type, which is more nearly approached by the earlier example from Margidunum (Pl. LXXVI. 2). A similar cup (Pl. LXXV. 8), which has been figured by Könen (*Gefässkunde*, Pl. XIII. 13), shows the same influence.

The influence of Form 33, however, is also shown in the central narrow groove which divides the rouletting into two zones—a feature which is

<sup>1</sup> As yet, no example, in Sigillata, of Form 29 has been recorded in which the relief-ornament has been supplanted by rouletting—a fact of considerable chronological value.

present in a more marked degree in the example from Colchester (Pl. LXXV. 13).

The vessels (Pl. LXXV. 14, 17) in the Guildhall Museum, London, and that from Rottweil (Pl. LXXVI. 3) belong to the same cylindrical type. This form has been found on several British sites, *e.g.* London, Colchester, Leicester, Margidunum, Silchester, and York (May, *York Pottery*; Pl. IX. 14). It is noteworthy that this rouletted Form 30 has not been recorded at Rheinzabern.

#### *Form 37.*

Figs. 1, 2, 4, Pl. LXXV. from Heiligenberg, Leicester (orange-red), and Niederbieber respectively, represent examples of this bowl, which may be dated from the reign of Hadrian to the beginning of the third century. They all possess a broad central zone of rouletting.

The shallow variant (Pl. LXXV. 5) is found in graves of the Antonine period.

The type, Ludowici SSb, from Rheinzabern (Pl. LXXV. 6) displays the influence of the contemporary and local Form 32 in the absence of a lip and the tendency of the rim to curve inwards.

#### *Form 33.*

Fig. 11 on Pl. LXXV. (Drag. 49) is obviously a rouletted variant of the plain Form 33. It has been found at Holt and other British sites.

#### *Form 31/37.*

Figs. 3, 10 and 12 on Pl. LXXV. from York, Rheinzabern and Niederbieber respectively, whilst retaining the general shape of Form 37, display a tendency to angularity of the wall, as met with in Forms 31 and 33.

The small foot-stand of the wide shallow dish, Drag. 48 (Pl. LXXV. 7), is suggestive of third-century manufacture and of native influence.

As has already been pointed out, the practice of rouletting plain forms in imitation of Arretine technique was very occasionally followed by the early South Gaulish potters, *e.g.* in a cup of Tiberian date now in the Trèves Museum (Pl. LII. 2). The rouletted two-handled cup from Innsbruck (Pl. LXXVI. 4) is strongly reminiscent of the earlier vessel.

Potters' marks appear to be unknown on this fabric.

### (iii) *INCISED SIGILLATA.*

PLs. LXXVII. and LXXVIII. with additional figures on  
PLs. LXXIX.-LXXXIII.

The technique of cutting facets or incisions on pottery in imitation of cut glass does not appear to have been applied to Terra Sigillata before the second century, but it was certainly in existence as early as the Antonine period, for fragments of this fabric have been found at Saalburg under the

"Wehrgang" of the stone fort <sup>1</sup> and in Scotland,<sup>2</sup> which was not *occupied* by the Romans after 180 A.D.

Dragendorff,<sup>3</sup> as early as 1895, called attention to the way in which the Sigillata potters of Lezoux copied the technique of cut glass in elegant designs of vine leaves, stars and circles on globular beakers (similar in form to Déchelette 72). But this technique was imitated in the first place on colour-coated ware previously to its application to Sigillata; for a beaker of white clay, painted orange-red, showing the characteristic oval facets of cut-glass vessels of the first century,<sup>4</sup> has been found at Bonn in a pit, which can be dated by other finds to the end of the first century and beginning of the second century. This specimen belongs to a group of vessels presumably made in Cologne, which are notable for being imitations of glass vessels, and are assignable to the same period.<sup>5</sup>

In the case of Sigillata vessels with cut-glass technique, the earliest (judging by their form) would be the wide-mouthed beakers which most closely approximate to a globular contour (Pl. LXXVII. 1 and 3, both from Lezoux),<sup>6</sup> and these may be referred with considerable probability to the Hadrian-Antonine period. The still globular Rheinzabern forms (Ludowici VSe, VSb, VSd, Pl. LXXVII. 4, 7, 8) may be a little later in date. The more ovate form, however, found at Niederbieber (Pl. LXXVII. 6) is obviously not earlier than the close of the second century. The elongated form, with a disproportionately narrow pedestal-base and narrow mouth with bead-rim, from Pfünz (Pl. LXXVII. 5), and the larger beaker of the same type from Westerndorf (Pl. LXXIX. 7) are probably still later in date, *i.e.* in the first half of the third century. A still later form is ascribed to the fourth century by Oelmann,<sup>7</sup> and displays the typical pedestalled foot (*Zapfenfuss*) of this period; it occurs in the Niessen Collection (Pl. LX. No. 1675). The execution of the fourth-century vessels with cut-glass decoration was, however, very inferior to the Lezoux products, which could not have been manufactured later than the middle of the third century.<sup>8</sup>

In addition to Lezoux, this technique was applied to Terra Sigillata at Trèves, Rheinzabern and Westerndorf. Dragendorff<sup>9</sup> mentions a specimen from the potteries at Trèves found in a third-century grave at Remagen; and a fragment of the everted rim of Drag. 41 is also figured from Trèves by Fölzer (Pl. XI. 16). In addition to beakers of the form Déch. 72 (Pl. LXXVII. 4, 7, 8), made at Rheinzabern, this pottery also produced pedestalled beakers of Rhine type (Ludowici VSa, VSc, Pl. LXXX. 3, 4) and pedestalled jugs with very simple or debased incised patterns (Ludowici KS, Pl. LXXXIII. 3). Other jugs with hollow pedestalled foot and with

<sup>1</sup> Behn, *Röm. Keramik*, p. 167.

<sup>2</sup> Haverfield, *Proc. Soc. Antiq.* 2nd Series, xxiii. No. 1, p. 119.

<sup>3</sup> *Bonn. Jahrb.* vol. 96, p. 122.

<sup>4</sup> Oelmann, *Niederbieber*, Abb. 2.

<sup>5</sup> Klein, *Bonn. Jahrb.* vol. 79 (1885), p. 178.

<sup>6</sup> Fig. 2, Pl. LXXVII. has a form or shape which suggests a late Celtic origin; it had a long life.

<sup>7</sup> *Niederbieber*, p. 33.

<sup>8</sup> See Déchelette, i. p. 192.

<sup>9</sup> *Bonn. Jahrb.* vol. 96, p. 123.



cut-glass technique occur at Bonn, and may have been manufactured either at Rheinzabern or Treves (Pl. LXXXII. 1 and 4). Westerndorf also turned out vessels in this technique, *e.g.* the Form 72 already referred to (Pl. LXXIX. 7) and a Drag. 52, spoilt in the baking, with large vine leaves and grapes bordered by grooves on both sides.<sup>1</sup>

The well-defined series of hemispherical vessels (Drag. 41) with cut-glass decoration (Pl. LXXVIII.) was derived directly from glass vessels, both in form and technique, and can be divided into two distinct groups:

- (i) an earlier group of strictly hemispherical form;
- (ii) a later form in which the rim is everted and a more or less pronounced carination is present.

The former group seems on several grounds to have been the earlier, and appeared about the middle of the second century in the Rhine district, probably at Rheinzabern. Other examples (Behn, *op. cit.* Nos. 1144-1147) are known in the museums of Bingen, Worms and Oberlahnstein. It seems to be unknown at Lezoux. In this group, Fig. 2 on Pl. LXXVIII. from Strasbourg is probably one of the oldest known specimens, judging by its shallowness, the width of the flat base, and the severity of design. It was copied directly from cut-glass vessels. A fine type of this hemispherical bowl in glass, with human figures (dancers), occurs also at Strasbourg.<sup>2</sup>

The second group is considered by Oelmann<sup>3</sup> to have arisen at a slightly later date. Its prototype is also to be sought in similar glass vessels.<sup>4</sup>

In this group the technique of the cut-glass decoration displays a distinct deterioration in style. In both groups there is a tendency to a slight concavity just above the base, and occasionally the base of the bowl rises slightly towards the centre.

This type (Drag. 41) persisted into the period subsequent to the evacuation of the German Limes, as shown by a bowl from a skeleton-grave at Remagen now in the Bonn Museum.<sup>5</sup> Potters' stamps appear to be unknown. A good example of the hemispherical incised bowl occurs at York.<sup>6</sup>

On the same plate (LXXVIII. 11) we have figured a small specimen of Form 44 with cut-glass decoration from Trèves, where it may have been manufactured (*v. supra*), and an urn from Bregenz (LXXVIII. 12) with similar technique. In the latter case the small rim and the general shape of the urn would seem to indicate a date not later than the second century. From a Bregenz grave we have also figured a two-handled cantharos with small base (Drag. 53; Pl. LXXXI. 7), probably of second-century date.

Cut-glass technique was utilised, though rarely (and certainly unnaturally), for depicting animals, *e.g.* on the Mortarium type, Drag. 45,<sup>7</sup> and this

<sup>1</sup> Behn, *Röm. Keramik*, No. 1636.

<sup>2</sup> Henning, *Strasbourg*, Pl. XXIX. 9.

<sup>3</sup> *Niederbieber*, p. 23.

<sup>4</sup> Niessen Collection, Taf. xxvii. No. 330-335.

<sup>5</sup> Oelmann, *Niederbieber*, p. 23.

<sup>6</sup> May, *York*, Pl. VIII. 2.

<sup>7</sup> Déchelette, ii. Pl. VI.

type, adorned with cocks, peacock, stag, etc., has been found in a skeleton-grave at Boulogne, associated with two-handled glass, barrel-shaped mugs (*barillets*), so common in the north of Gaul, bearing the stamp (FRON) of the glass worker FRONTINVS, who flourished in the fourth century.<sup>1</sup>

Vessels of Terra Sigillata with cut-glass technique have been met with on many sites in Britain and have been described in several publications, e.g. Walters, *C.R.P.* M 2380-2396; May, *York*, Pl. VIII. 1, 2; May, *Silchester*, Pl. XXXVII.; Pryce, *Margidunum* (*Journ. Brit. Arch. Assoc.* Vol. xviii. Pl. II. 8, 8 A), etc.

(iv) *SIGILLATA DECORATED EN BARBOTINE AND WITH PAINTED PATTERNS.* PLS. LXXIX. to LXXXIII.

The technique of decoration *en barbotine* consists essentially in executing a design in relief by pouring a liquid clay of creamy consistency from a quill, pipette or spatula on the surface of the completed vessel.<sup>2</sup>

In this way a high rounded relief is obtained—bolder, but coarser, than that resulting from the use of moulds.

Although this method of decoration would seem to have arisen in the first instance from the imitation of beaten metal, there is little doubt that in some of its later manifestations it was influenced by a similar technique in embossed glass vessels.<sup>3</sup>

The earliest ceramic prototypes of this technical process would seem to be the so-called "Gnathia" vases of the Hellenistic period in Southern Italy and South Russia, in which designs in white or yellow barbotine (garlands and even birds) were executed on black varnished vessels.<sup>4</sup> In this region also Italian bowls of Megarian type by C. Popilius were signed *en barbotine*.

On the other hand, red-glazed vessels with barbotine designs have been found at Kertch in South Russia,<sup>5</sup> which would appear to be approximately contemporary with Arretine Sigillata.<sup>6</sup> A similar date may be ascribed to a small dish of red ware from Tharros in Sardinia with conventional ivy leaves and dots in barbotine on the wide rim.<sup>7</sup>

<sup>1</sup> Déchelette, ii. p. 313.

<sup>2</sup> Brongniart, *Traité des arts céramiques*, i. p. 425.

<sup>3</sup> Kisa, *Glas im Altertum*, p. 472; its persistence, in glass, down to the late third century is indicated by the fact that cylindrical glass vessels, with designs in high relief of lions, bears, dogs, peacocks, gladiators, etc., have been found in Scandinavian graves (Du Chaillu, P., *The Viking Age*, i. Figs. 628, 629, 631, 632, 650-654).

The shape of the vessel and the character

of the designs, such as the borders of bead-rows, are strongly reminiscent of the Sigillata Form 30, yet the technique is similar to that of barbotine decoration.

<sup>4</sup> Behn, *Röm. Keramik*, Nos. 48-51.

<sup>5</sup> Dragendorff (*Bonn. Jahrb.* ci. p. 145 and Fig. 5) considers these vessels to have been made in imitation of glass.

<sup>6</sup> Walters, *C.R.P.*, describes a Kotyle (L. 15) from Kertch, decorated marginally with a wreath *en barbotine*.

<sup>7</sup> Walters, *op. cit.* L. 49, Pl. XVII.

Arretine potters do not seem to have favoured this technique to any great extent,<sup>1</sup> but it obtained a considerable vogue on coarse ware (chiefly "Terra Nigra") in the reigns of Augustus, Tiberius and Claudius.

Examples of this technique are to be found in the raised herring-bone pattern of Augustan wares at Haltern (Loeschcke Type 86) and Trèves (Grave-groups 319, 504), and in the small globular spine-beakers, in varnished (Loeschcke Type 43 B<sup>2</sup>) and green-glazed (Loeschcke Type 23) ware, both found at Haltern. The shallow hemispherical bowl (Ritt. Type 22, see also Pl. XLVIII. 17, 18, 19), which dates back to the Augustan period, was also sometimes decorated *en barbotine* (see Ritterling, *Hofheim*, Abb. 54, Figs. 10, 12) in the Claudian period. Barbotine decoration on *Terra Nigra* attained a great development in the reigns of Claudius and Nero, and continued with somewhat diminished popularity through the Flavian period to a later date, although it became poorer both in execution and design (see Ritterling, *Kastell Wiesbaden*, Pl. XIII. 13).

In addition to the use of studs (Ritterling, *Hofheim*, Type 106; Wroxeter, Rep. ii. Type 59) derived from the spines of the spine-beakers, we find loops, crescents (Ritt. Type 118), horse-shoes (May, *Silchester*, Type 156), circles and garlands of ivy leaves and berries arranged in a most varied and decorative manner (see Ritterling, *Hofheim*, Type 81 A; Curle, *Newstead*, Fig. 30, from Trèves; Walters, M 128; and Catalogue of Guildhall Museum, Pl. XLIII. No. 605).

Belgic platters were also sometimes decorated with conventional ivy leaves in barbotine, as in an interesting example, with a blue-black glaze, recently found at Margidunum.<sup>3</sup>

The barbotine method—so far as present evidence shows—was not applied to their products by the provincial Sigillata potters until the reign of Nero, for no examples of this technique are forthcoming, in Sigillata fabric, from the Claudian occupation at Hofheim,<sup>4</sup> whilst fragments of Forms 35 and 36 (Pl. LIII.) are not infrequent in the pre-Flavian *Moor-schicht* at Wiesbaden.

Form 35 is chiefly a first-century type, whilst the larger vessel of the same service, *i.e.* Form 36, persisted right through the second century, for it still occurs in the Pan Rock Collection and at Niederbieber.

The Flavian dishes, Curle 11 (Pl. LXXI. 10-14), and Dragendorff Form 42 with strap handles (Pl. LIV. 1-3, 5), also had their rims decorated with ivy leaves or geometrical pattern in barbotine; they persisted into the early second century (see Pl. LXXI. 15, 18, 19).

<sup>1</sup> Déchelette (ii. p. 310) only noticed two flagons of Terra Sigillata with palmettes *en barbotine* in the Museum of Arezzo.

<sup>2</sup> Cf. Behn, *Röm. Keramik*, Abb. 4, 4, for a "spine-beaker" in yellow-red clay from Florence.

<sup>3</sup> This ware, which is grey-white in fracture and with a blue-black glaze, would appear to

be typically Claudian, and occurs in the first period at Hofheim in urn form (Ritt. Type 81 A).

It is either immediately antecedent to or contemporary with the earliest examples of the barbotine decorated form, Drag. 35.

<sup>4</sup> But see the early platters from Colchester and Leicester (Pl. LIII. 1, 20) which might well be of Claudian date.



This type of marginal decoration was continued on the rims of such purely second-century types as Dragendorff Form 46 (Pl. LV. 24), and the tray Dragendorff 39 or Ludowici Oa (Pl. LVII. 1, 2). But in the second century a variation in treatment will be observed, for whilst in the first century this technique was confined, in Sigillata vessels, to plant or geometrical patterns, at a later date the potters frequently depicted animals, birds, fishes and figures of men. This custom was probably largely borrowed from the so-called "hunt cups" of Rhine type and similar fabric which reached their apogee in the middle of the second century.

Green-glazed "hunt cups" with gladiators and animals in barbotine occur at Bonn<sup>1</sup> and Nymwegen, and belong at latest to the second third of the second century.<sup>2</sup>

Tentatively applied to the tray Dragendorff 39 (Pl. LVII. 1), the Mortarium type Dragendorff 43 (Pl. LXXIII.), and the Rheinzabern type, Ludowici Tf (Pl. LXV. 6, 7), figure-subjects become common on Ludowici Types SMA, SMB, and SMC (Pl. LXII. 1-6), and particularly so on the globular beaker Dragendorff Form 54 (Pl. LXXIX.).

The favourite representations consisted of hunting and gladiatorial scenes, and all these types, with the addition of birds (especially peacocks) and fishes (dolphins), were depicted in barbotine on globular Sigillata beakers (Dragendorff 54, Ludowici VMg, VMi, VMk, Niederbieber 24 c, Pl. LXXIX. 8-13), two-handled canthari (Drag. 53, Pl. LXXXI. 2, 3), jugs (Ludowici KMa, the gladiator-jug of Rheinzabern, Pl. LXXXIII. 5), and pedestalled obovate beakers in imitation of Rhine types (Ludowici VMa, VMd, VMh, VMc, Pl. LXXX. 5-8).

An interesting and isolated example of the application of barbotine decoration to a moulded bowl is a large Form 37 by IVLIVS of Rheinzabern, in which the figure of a dog chained to a post is executed in barbotine on the plain wide rim (Pl. XXIX. 10). This unique bowl is assignable to the end of the second century.

In East Gaul the barbotine method of decorating Sigillata vessels is particularly characteristic of the Rheinzabern pottery, and the period of its most intense manufacture may be considered to have fallen in the last two-thirds of the second century. The process was, however, practised to a slight extent also at Trèves, but was confined there to the simple representation of conventional ivy leaves on Forms 36 and 44 (Fölzer, Pl. XI. 2, 4-6).

Garlands of ivy leaves and other scroll work of plant forms, which had taken a subsidiary place as an ornamental border to the representations of figures, survived the disuse of the latter (at latest about the middle of the third century), and persisted on a kind of imitation Sigillata and on *Terra Nigra* even into the fourth century.<sup>3</sup>

<sup>1</sup> Koenen, *Gefässkunde*, Pl. XVI. 19.

<sup>2</sup> Oelmann, *Niederbieber*, p. 6.

<sup>3</sup> Oelmann, *Niederbieber*, p. 6. He cites as examples of scroll-work in barbotine of fourth-

Barbotine decoration was also employed for accessory stalks and leaves in the Sigillata vases with appliqué figures manufactured in the late second century and first half of the third century.

Déchelette (ii. p. 312) also calls attention to the fact that beakers in brown, red or black varnish, with Bacchic inscriptions in white barbotine, are common in graves of the third and fourth century in the north and east of Gaul (well represented in the Boulogne Museum). Black varnished jugs and beakers, with similar convivial inscriptions in white barbotine, and with rich scroll work and even busts of deities, are frequent in graves of the Constantine period in the Rhine district.<sup>1</sup> They would appear to have been made principally in Trèves and possibly also in Cologne and Mainz.

The technique of the so-called "*painted*" Sigillata is nothing but white barbotine applied in a very fluid condition. As already mentioned, it was used on the Hellenistic Gnathia vases of Southern Italy; it was frequent on vessels of the late La Tène period<sup>2</sup> (mostly in red barbotine on a white ground). Instances also are not wanting of the use of thin white barbotine in ornamenting "*varnished*" wares in Claudian and Neronian times; e.g. a bowl (Ritterling Type 22) at Vindonissa with white circles,<sup>3</sup> and an orange-coated bowl with similar decoration from Margidunum in a deposit of Neronian date. We have also seen that white (and to a less extent yellow) barbotine was used extensively in the second and third centuries for convivial inscriptions, circles and scroll work on black-varnished ware. This technique was transferred to Sigillata or imitation Sigillata, e.g. on Sigillata jugs from Bonn and Cologne (Pl. LXXXII. 5, 7, 9, 10 and 12, and Pl. LXXXIII. 4), on a double-handled cantharos with white circles from Niederbieber (Pl. LXXXI. 8), on a yellow-red tray with red barbotine from Mainz (Behn, *Röm. Keramik*, No. 1291, Taf. vi. 1), on pedestalled Sigillata beakers of the Rhine hunt-cup type (Ludowici VWa and VWb, Pl. LXXX. 10, 11), and on globular Sigillata beaker urns approaching Dragendorff 54 in shape (Niederbieber 24 D, Pl. LXXIX. 15).

It seems certain that white barbotine was still extensively used subsequent to 260 A.D. (the destruction of Niederbieber), for it is found on vessels from the skeleton-graves of Vermand.<sup>4</sup> But from the middle or end of the third century it degenerated into a rather poor quality of white painting,<sup>5</sup> e.g. on imitation Sigillata vessels with inscriptions and inferior scroll work belonging to the fourth century (Pl. LXXX. 12, LXXIX. 14). Even in the fifth century it occurs on the last offshoots of Terra Sigillata, and Oelmann (*Niederbieber*, p. 7) cites as examples of this pottery of the

century Sigillata Taf. lx. (Nos. 1675, 1676) of the Niessen collection, and on Terra Nigra of the same age also in the Niessen collection (Taf. ciii. Nos. 2952, 2956).

<sup>1</sup> Koenen, *Gefässkunde*, Pl. XVIII. 1-13; and see Oelmann, *Niederbieber*, Abb. 12, 14; and Behn, *Röm. Keramik*, Taf. vi. 2.

<sup>2</sup> Bulliot, *Album*, *Mt. Beuvray*, Taf. iii. sqq.

<sup>3</sup> Oelmann, *Niederbieber*, p. 7.

<sup>4</sup> Eck, *Les cimetières gallo-romains de Vermand et de St. Quentin*, Taf. ix. 6.

<sup>5</sup> Koenen, *Gefässkunde*, xviii. 15.

latest Roman period specimens from the Barbara baths at Trèves and from the Saalburg Museum (cemetery of the "Guten Mann" on the left bank of the Rhine, and from the amphitheatre of Metz).

(v) *SIGILLATA DECORATED WITH APPLIED RELIEFS.*  
PL. LXXXIV.

The method of obtaining relief-decoration by means of stamped patterns applied to the exterior of the vessel—in contradistinction to that derived from the use of moulds—had already been practised at Pergamum<sup>1</sup> and Arretium before its adoption by the provincial potter.

In Arretine ware this technique is particularly frequent on the straight-walled beakers<sup>2</sup> (Fig. 5) made in imitation of the metal "skeleton" cups, as found at Bosco Reale.

In provincial Sigillata<sup>3</sup> it is probable that the applied method began to be employed about the end of the first or beginning of the second century.

The contour of Déchelette's figure-types, viz. the ovoid or olla Forms 72 and 74 (Déch., ii. Pl. I.), and especially that of the Cornhill vase (Fig. 1), strongly support this early dating.

This technique would seem to have arisen as a necessary consequence of the desire to ornament the upper or even the entire surface of jars or ollæ with relief-decoration after the manner of the more open-mouthed vessels, Drag. 11, 29, 30, 37, and Knorr 78. The impossibility of doing this without a change of technique is demonstrated by the plain upper band which is always met with on the jar forms Déch. 65, 66, 67, 68, all of which bear moulded relief.

In this connection Déchelette's figure-type, Form 74 (Fig. 4), is especially interesting, inasmuch as it is simply his Form 67 (a type common to South Gaul and to Lezoux) furnished with handles. A reference to Pl. XXI. Figs. 8-13, will demonstrate this point as well as the fact that the moulded decoration is confined to the lower portion of the ovoid wall. In the case of Form 74, the potter in order to decorate the upper half of the bowl in relief has perforce resorted to the applied method.

The relatively early date of the jar is demonstrated, not only by its contour, but also by the character of its decoration, viz. a lion striding over the "grass-tufts" so frequently seen in South Gaulish work of the late Flavian period.

Tentatively, also, the applied method appears in the first half of the second century, as in the medallion of the "Medusa" bowl now in the Guildhall Museum (Pl. LIV. 6), and in order to obtain a higher relief for

<sup>1</sup> See Conzé, *Altortümer von Pergamon*, 12, p. 276.

<sup>2</sup> See also Dragendorff, *Bonner Jahrb.* 96/97, p. 47.

<sup>3</sup> Applied decoration occurs on non-Sigillata fabric as early as the reign of Claudius, as e.g. Ritt. Type 22 Ac (Ritterling, *Hofheim*, Pl. XXXII.).



the ornament in Form 37, as in examples found at Holt and Margidunum.<sup>1</sup> At Lezoux, where this technique especially flourished in the late second century and first half of the third century, it practically supplanted the manufacture of moulded Sigillata, which during this period was still carried on at certain East Gaulish potteries, such as Trèves.

The modelling in early examples, such as the Cornhill vase (Fig. 1), is extremely good, whilst in later specimens it is negligent and barbaric (Figs. 2, 3).

In Fig. 2 we note a common association of two techniques in this ware; the figures being *à relief d'appliqué*, whilst the plant-life is *en barbotine*.

In the late second century and first half of the third century this method was employed in the application of the lion-faced spouts to the wall-sided Sigillata-mortarium, Drag. 45 (Pl. LXXIV. 1-4).

An interesting parallel to the wall-sided mortarium, decorated by the applied method and illustrated by Déchelette (Fig. 6), is forthcoming from York (Fig. 7). In both examples a similar reclining figure embraces the spout with his left arm.

At Niederbieber the wall-sided mortarium with lion-faced spout is plentiful, and an example has been found in a "skeleton"-grave at Vermand.

Applied ornament in white paint is also found at Niederbieber (Pl. LXXXI. 8).

In the pseudo-Sigillata medallion vessels of the Rhone valley, dated to the third century, this method also obtains (Fig. 8).

It was further employed for decoration by means of small gods and other mythological subjects in the dark-varnished wares of Trèves late in the second century and also in the third century.<sup>2</sup>

This type of decoration is not common in Britain, but examples have been found in London, Colchester, Felixstowe, Lincoln, Richborough, Wroxeter and York.

#### (vi) STAMPED WARE.

Hemispherical bowls with chequered decoration (Marne bowls).

This very distinctive type of decorated bowl marks one of the final stages of evolution in the Sigillata industry. Whilst the shape is in general that of the hemispherical bowl, Form 37,<sup>3</sup> all attempt at pictorial representation has been abandoned, and the sole method of decoration consists of successive zones (2-9) of simple, oblong geometric designs, separated from each other by vertical lines, and ranged in a manner recalling rows of bricks with different patterns (Pl. XI. 5). This style of ornament marks a

<sup>1</sup> The masks on the bowl found at Bath (Pl. XXVIII. 15) are probably also examples of this technique.

<sup>2</sup> For examples of applied relief in pseudo-Sigillata, see May, *Silchester*, Pl. XXXV. 1-4.

<sup>3</sup> Déchelette (ii. Pl. XI. 1) figures a specimen showing a marked degree of carination.

reversion to a mode prevalent in La Tène culture, for vases decorated by a somewhat similar system of striated zones occur at Mont Beuvray<sup>1</sup> and in the Rhine provinces at the commencement of our era. It was still continued throughout the first century on Terra Nigra of Belgic technique, but these earlier vessels differ from the later series by the thinness of their walls and by the paste being in general grey or black.

In the class of vessels described in this section the wall is thick and the proportions are clumsy and squat. Yet the derivation from Form 37 is not merely evident in the hemispherical shape, the nature of the foot-stand, the plain zone above the decoration and the moulded lip, but also in the fact that in some cases the ovolo pattern is utilised for the decoration, as on a bowl from Strasbourg,<sup>2</sup> and in which the zones (seven in number) consist exclusively of a repeated ovolo pattern, or in another Strasbourg example<sup>3</sup> in which the ovolo is used in an inverted position. On a Marne bowl in the British Museum,<sup>4</sup> and in specimens from Richborough,<sup>5</sup> the ovolo pattern is utilised only in a subsidiary manner, occurring interspersed here and there with geometrical patterns. Possibly these instances are somewhat earlier in date than the bowls in which a purely geometrical system of decoration prevails. In the majority of cases we find that the decoration consists of horizontal, diagonal or vertical striations, cross-hatching or networks, lattices and gridirons, crosses with dots in the spaces, dots in a quincunx, two dotted circles placed vertically, rows of small sunk squares, etc. These patterns appear to have been impressed in the soft clay, not with a roulette, but by separate figure-stamps. The paste is a pale red clay with a poor red glaze, either bright red, orange red or dull red.

The distribution of these vessels indicates that they were made in North and North-East Gaul, especially in the district of the Marne valley, whence most of the British Museum specimens were obtained,<sup>6</sup> but it has not yet been established that they were actually manufactured in this region. Déchelette (ii. p. 327) considers that this type was introduced into Gaul by the first invasions of the barbarian Germanic tribes, for they are not known in Central or Southern Gaul, but are frequently met with in the Rhine district, *e.g.* at Strasbourg, Mainz, Alzey, Rottweil, etc. They have been recorded from several sites in Britain, *e.g.* London,<sup>7</sup> Lympne,<sup>8</sup> Richborough,<sup>9</sup> Pevensey,<sup>10</sup> Silchester,<sup>11</sup> and as far north as Margidunum.

They are found in the cemetery of Vermand (end of third century to beginning of fifth century), in a fourth-century cemetery at Chamois (Oise Dep.), and an example in the Reims Museum occurred in a barbarian grave

<sup>1</sup> Déchelette (ii. Pl. XI. 3 and 4).

<sup>2</sup> Henning, *Strasbourg*, xxiv. 23.

<sup>3</sup> *Ibid.* xxiv. 24.

<sup>4</sup> Walters, *C.R.P.* M 179.

<sup>5</sup> Smith, C. R., *Antiquities of Richborough*, etc., Pl. IV.

<sup>6</sup> Walters, *C.R.P.* M 174-187.

<sup>7</sup> Walters, *C.R.P.* M 2460-2461.

<sup>8</sup> *Ibid.* M 2462.

<sup>9</sup> Smith, C. R., *op. cit.* p. 73.

<sup>10</sup> Salzmann, *Sussex Arch. Soc. Collections*, lii. p. 92, Pl. X.

<sup>11</sup> May, *Silchester*, Pl. XXXIV. and XXXVIII.

belonging to the close of the Roman Empire.<sup>1</sup> At Pevensey this type of bowl was found associated with coins extending from Gallienus (253-268 A.D.) to Gratian (375-383 A.D.), whilst at Strasbourg it occurred in a grave with a coin of Constantine II. (340 A.D.) from a cemetery attributed to the period extending from the end of the third to the middle of the fourth century.<sup>2</sup> It may therefore be considered to be chiefly characteristic of the later years of the third century, the whole of the fourth century, and to extend into the fifth century, for on the Continent vessels with the same type of decoration occur in Merovingian graves of the Rhenish provinces.

The dimensions vary considerably, *e.g.* from  $2\frac{1}{4}$  to  $4\frac{5}{8}$  inches in height and from  $5\frac{1}{2}$  to  $8\frac{3}{4}$  inches in diameter, but the relative proportions remain fairly constant, *i.e.* the diameter is a little more than twice ( $c.\frac{7}{3}$ ) the height. Potters' marks are unknown.

Attention is directed to a well-defined class of stamped ware, in imitation of the Sigillata Form 37, recently discovered at Holt by Mr. Acton.<sup>3</sup> This ware is pale reddish-brown in colour and of good texture. The stamped decoration takes the form of rosettes and palmettes, etc.; the palmettes being closely similar to those which are used by the East Gaulish potters of the ALPINIVS group at Trèves (Pl. XVIII. 6). It may be dated to the third century.

A still later class of ware covered with a red glaze or slip and decorated with impressed rosette stamps of a somewhat barbaric type has been described as pseudo-Samian. In this country it has been found mainly in the Roman forts of the Saxon shore during their last period of occupation, *e.g.* at Richborough, Lympne<sup>4</sup> and particularly at Pevensey.<sup>5</sup> Specimens have also been found in London,<sup>6</sup> Albury (Surrey)<sup>7</sup>, Boxmoor (Herts),<sup>8</sup> Woodyates, Bokerley, and Wansdyke,<sup>9</sup> Silchester,<sup>10</sup> Wroxeter,<sup>11</sup> Colchester,<sup>12</sup> and as far north as Margidunum.

It is evident that in the last years of the Roman occupation this ware was fairly widely distributed in Britain.

<sup>1</sup> Déchelette, ii. p. 326.

<sup>2</sup> Straub, *Le cimetière gallo-romain de Strasbourg*, 1881, Pl. X. 4.

<sup>3</sup> Haverfield, F., *Roman Britain in 1914*, p. 19 *sqq.* Figs. I B, IO, II.

<sup>4</sup> Smith, C. Roach, and F. W. Fairholt, *The Antiquities of Richborough, Reculver and Lympne*, Pl. IV.

<sup>5</sup> Salzmann, *Sussex Arch. Soc. Collection*, li. Pl. 14.

<sup>6</sup> Walters, *C.R.P. M* 2463-2477 and Fig. 242.

<sup>7</sup> *Ibid.* M 2476.

<sup>8</sup> *Ibid.* M 2475.

<sup>9</sup> Pitt Rivers, *Excavations at Bokerley Dyke and Wansdyke*, iii. pp. 120, 142.

<sup>10</sup> May, *Silchester*, Pl. LVII.

<sup>11</sup> Anderson, *The Roman City of Uriconium*, p. 56.

<sup>12</sup> Price, *Catalogue of the Joslin Collection*, p. 31; Grave-group 75.



## CHAPTER X

### THE ORIGIN AND EVOLUTION OF TERRA SIGILLATA

IN this attempt to trace the special characteristics of Terra Sigillata to their original sources, we have in the first place to discuss the technique of a number of ancient ceramic products, with more especial reference to the shapes of the vessels, whether plain, or decorated in relief by means of moulds or applied patterns; and in the second place we shall give a brief sketch of the probable lines of descent of some typical designs occurring on provincial Sigillata.

It has already been shown (Chapters V.-VIII.) how dependent the Sigillata potter of South Gaul was upon the work of his Italian predecessor, both with regard to the forms of his vessels and to many details of his decorative designs. The evidence which we shall adduce in this chapter will, it is hoped, still further confirm the conviction that the Sigillata industry was no novel or sudden phenomenon, appearing spontaneously and fully developed like Pallas Athene from the brain of Zeus, but that, on the contrary, it was merely a natural and logical end-product in the evolution of ceramic art from the Mycenæan period down to Roman times. In the course of this evolution the influence of correlated arts, such as those of the metal worker and the sculptor, played an important part, both with regard to the forms of the vessels and to their mode of decoration.

The characteristic red glaze of Arretine ware (already described in Chapter II.) was preceded at Arretium by a black glaze, probably in imitation of metal;<sup>1</sup> but there was no breach of continuity in the industry, for many of the same potters' stamps occur on both varieties of Arretine pottery.

It is usually considered that this transition in technique took place towards the end of the second century B.C. or about the beginning of the first century B.C., for the red-glazed ware of Arretium is still absent from the earlier graves of the first century B.C. in the Esquiline Hill.<sup>2</sup>

<sup>1</sup> Fabroni, *Storia degli vasi aretini*, Pl. I. Fig. 2, and Gamurri, *Ann. d. Lincei*, 1872, p. 270. For a reversion to this practice in the early part of the second century A.D., see Déchelette, i. p. 282, Nos. 28, 29, Form 64, *à vernis métallique*, by the potter LIBERTVS.

<sup>2</sup> Dragendorff, *Terra Sigillata*, Bonn. Jahrb. 96.

Oxé, however (*Zur älteren Nomenklatur der röm. Sklaven*, Rheinisches Museum, N.F. 59 (1904), p. 130), ventures on a more precise date, viz. 40-30 B.C., for the origin of Arretine

The Arretine black ware shows considerable affinities to the still earlier black-glazed ware of Cales<sup>1</sup> (third to second century B.C.), but it may be doubted if there was any close genetic connection between Arretine and Calene pottery, for the two centres have few forms in common,<sup>2</sup> and the most characteristic product of Cales, viz. the *omphalos* dishes, is not represented at all at Arretium. Dragendorff,<sup>3</sup> moreover, considers it quite improbable that all the Calene ware was made at Cales, and is of opinion that only a small portion, viz. the wares stamped by GABINIVS and ATILIOS (and also CANOLEIOS) can be confidently ascribed to this centre.<sup>4</sup> Indeed, a pottery was discovered at Kertch in South Russia by Malmberg,<sup>5</sup> with several moulds intended for ware similar to that of Cales. In another part of South Russia, viz. at Olbia, *gutti* (lamp-fillers) resembling those of Cales have also been found; but, as Dragendorff has pointed out, there are grounds for concluding that these black-glazed wares of Cales and South Russia derived their inspiration from a common source somewhere in Asia Minor.<sup>6</sup> Thus at Priene,<sup>7</sup> Troy and elsewhere in Asia Minor there have been found black-glazed dishes with a prawn in applied relief in their centre; the fidelity of the representation gives colour to the suggestion that they were manufactured in a maritime locality.<sup>8</sup>

The reliefs of Etruscan *bucchero* (sixth to fourth century B.C.) do not appear to have exerted any genetic influence upon the moulded ware of Arretium, although, broadly speaking, both products were indigenous to the same soil. Some *bucchero* owed the formation of its relief-decoration not to moulds, but to the impress of an engraved cylinder revolving on the clay of the vessel whilst still plastic, and in this case derived its decoration not from Ionian sources, but from Corinthian pottery and metal work. Indeed, an Etruscan origin for *bucchero* has been altogether denied by some authors, e.g. Rayet and Collignon<sup>9</sup> are of opinion that, since similar vases occur in Sicily and at Tarentum, the centre of manufacture of this ware was probably some Dorian town in Sicily, whence it was exported to Etruria, possibly from Syracuse.<sup>10</sup>

red-glazed ware. He bases his argument on the manner in which the names of masters and slaves are combined in the potters' stamps, and he comes to the conclusion that none of the combinations occurring on Arretine red ware is earlier than the last years of the Republic, whilst the majority of them show a similarity to formulæ in vogue during the early years of the Empire.

<sup>1</sup> Pagenstecher, R., *Calenische Relief-keramik*, Jahrb. d. arch. Inst. Ergänzungsheft 8. The Calene wares show two distinct types: (i) phialæ with omphalos, and (ii) phialæ or plates with a moulded medallion.

<sup>2</sup> Behn, *Röm. Keramik*, p. 27, notes, however, that a type-figure of Cassandra on a lamp-filler of Cales (his No. 178) was transferred to Arretine Sigillata. He also points out that the Arretine ovolo closely resembles the ovolo characteristic of Calene ware.

<sup>3</sup> *Op. cit.* p. 25.

<sup>4</sup> A Calene origin is indisputable in the case of omphalos bowls bearing such stamps as "L. Canoleios L.f.fecit Calenos" and "L. Gabinio T. n. Caleno."

<sup>5</sup> *Mat. z. Arch. Russlands*, vii. St. Petersburg, 1872.

<sup>6</sup> Froehner, *Coll. Græco*, Pl. XCII.

<sup>7</sup> Behn, *op. cit.* p. 16, Taf. ii. 1; cf. also Pagenstecher, *Calen. Relief-keramik*, p. 11.

<sup>8</sup> The decoration of the Gaulish Sigillata dish with a medallion of a Medusa head in its centre (Pl. LIV. 6) may have been inspired by the frequent occurrence of this emblem or other figures in high relief in the centre of Calene vessels or allied types.

<sup>9</sup> *Hist. de la céramique grecque*, p. 340.

<sup>10</sup> Loeschcke, *Arch. Zeitung*, 1881, p. 44.

Here, too, the decorative relief was in imitation of metal ware, *e.g.* of bronze vases made in Corinth about the same period (sixth and fifth centuries). Some of the Etruscan *bucchero* was, however, undoubtedly made in moulds, *e.g.* at Clusium (Chiusi), Volci and Volaterra, whilst the practice of applying medallions (also made in moulds or separately modelled) on dishes and vases was confined to the maritime region of Etruria (Cervetri, Veii and Corneto), and was probably derived from Ionia. In this connection reference may again be made to the above-mentioned dish from Priene with a medallion of a prawn in relief.

Yet it is clearly not to the stiff and archaic Etruscan *bucchero* that we should look for the origin of Arretine red-glazed ware with its graceful and life-like representations of Hellenistic art; its source of inspiration must be sought in other fields, and these are to be found in Greece, Asia Minor and Southern Italy. In this connection stress may be laid on the significant fact that the actual transition in technique from black glaze to the true red glaze of Terra Sigillata was accomplished in Asia Minor about a century or more before the Arretine potters adopted red in preference to black glaze. Whilst Conzé<sup>1</sup> assigns this period at Pergamum to the approximate date of 200 B.C., Behn<sup>2</sup> states that the transition had already been accomplished at this pottery-centre about the middle of the third century. Vessels have been found at Pergamum in which this change of technique is actually visible in a single specimen, *e.g.* in plain ware with black glaze above and red below, and in relief ware with red above and black below.<sup>3</sup> Similarly, a plate from Paros still retains a deep black glaze internally, whilst its external glaze is a bright coral-red.<sup>4</sup>

At Olbia, too, in South Russia the typical red Sigillata belongs to an earlier period than at Arezzo, and the technique had already reached a high degree of excellence, for some of the vessels are almost as thin as paper. Dragendorff<sup>5</sup> ascribes them to a date as early as the third century B.C. This ware was found in a cemetery not later than that of Myrina in Asia Minor (dated by Pottier and Reinach<sup>6</sup> to the second half of the third century B.C.), and is quite obviously in imitation of metal vessels, exhibiting sharp angles, edges and ridges, whilst they are frequently provided with foot-stands. Potters' stamps in small Greek letters often occur; and even the stamp in the form of the sole of a foot (*in planta pedis*) is present on certain specimens from Olbia (sacked by the Getæ in 50 B.C.), although this mode of stamping did not appear at Arezzo until the commencement of the Christian era.<sup>7</sup>

Although there are some grounds therefore for considering that local Sigillata potteries may have existed in South Russia, *e.g.* at Olbia and Kertch,

<sup>1</sup> *Kleinfunde in Pergamum*, p. 22, and see Pagenstecher, *Calenische Relief-Keramik*, p. 170, for a similar conclusion.

<sup>2</sup> *Röm. Keramik*, p. 15.

<sup>3</sup> Conzé, *op. cit.* Taf. v.

<sup>4</sup> Behn, *op. cit.* p. 15.

<sup>5</sup> *Terra Sigillata*, Bonn. Jahrb. 96, p. 80.

<sup>6</sup> *La Nécropole de Myrina*, Paris, 1887.

<sup>7</sup> Loeschcke, S., *Haltern*, p. 186, was only able to record a single example at Haltern.



there seems also to be undoubted evidence for concluding that Sigillata vessels were exported in the Hellenistic period from Asia Minor to Russia on the one hand, and to Egypt on the other. Thus the Greek stamp EPMA has been found on Sigillata ware both in South Russia and at Ephesus,<sup>1</sup> whilst another Greek stamp XAPIC (possibly a greeting like the Latin SALVE on some provincial Sigillata), occurring on a Sigillata cup with rouletted lip at Alexandria, has been recorded not only at Priene and Pergamum, but as often as five times at Ephesus. The British Museum possesses several excellent examples of Terra Sigillata from Asia Minor, *e.g.* "good red glaze from Tarsus" with a Greek stamp (L 36-38), red-glazed ware from Knidos, and a fine red-glazed jar with an ivy wreath in high relief from Laodicea.<sup>2</sup>

Turning now more particularly to the question of the origin of moulded vessels, it is possible to trace a close developmental connection between the decorated hemispherical vessels of Arretium and the so-called Megarian bowls of Greece and Asia Minor, which were made in the third century and the beginning of the second century B.C. The Megarian type of bowl retained its characteristics very persistently, for many of the Arretine examples agree with those of Greece, Asia Minor and South Italy in the absence of a foot-stand—the base of the vessel being frequently ornamented with a rosette (or some similar floral form) with radiating petals and sepals (*cf.* the Arretine bowls, Pl. II. 7, 8, Pl. XXIII. 5, Pl. XXVIII. 13, with their Megarian prototypes from Pergamum, Samos, Athens and South Italy, Pl. XXIII. 1-4 and Pl. XXIX. 12). It is evident that the decoration of these bowls was designed in this manner so as to expose the basal ornament to view when the vessel was empty and rested inverted on its rim.

This form of vessel can be traced back to Mycenæan pottery, *e.g.* to a polychrome moulded bowl of the Middle Minoan period (Pl. XXVIII. 8), and to the contemporary Egyptian lotus-bowls of the XVIII. Dynasty. The Egyptians had already imitated bowls of beaten metal (Pl. XXVII. 8) in bowls of blue faïence (Pl. XXIV. 11), and there can be little doubt that this procedure of translating metal forms into pottery occurred independently at different periods for the benefit of a *clientèle* that could not afford to purchase vessels of silver and bronze.

The Megarian bowls of South Italy differed from their Grecian prototypes in bearing their potters' stamps in Roman letters instead of in Greek script. Here the manufacture of these moulded vessels found a congenial soil for its development, for, as we have seen in the case of Etruscan *buccheri*, relief-ware was popular in Italy at a time when painted vases held the field in Greece.<sup>3</sup>

<sup>1</sup> Behn, *op. cit.* p. 34.

<sup>2</sup> Walters, *C.R.P.* Pl. VIII. I. 35.

<sup>3</sup> It may be borne in mind that Greek

painted vases had supplanted the earlier native Grecian relief-ware of the close of the seventh century, such as the well-known Bœotian pithoi with two friezes of animal

Moulds for making "Megarian" bowls have been found at Athens, *e.g.* a specimen is recorded from the Piræus<sup>1</sup> showing the usual rosette at the base and with hexagons of deeply incised ellipses on the body. Similar moulds for Megarian vases also occur abundantly at Pergamum,<sup>2</sup> and it is probable that these very popular drinking vessels were made at several centres in Ionia as well as in Attica. Indeed, Pliny,<sup>3</sup> as late as the first century A.D., expressly states that both Pergamum and Tralles in Asia Minor were centres of manufacture of Samian ware (a term which he probably used in a generic sense).

It is probable that there were other centres of manufacture, *e.g.* in South Russia, where many bowls of Megarian type have been found,<sup>4</sup> and it is noteworthy that in one of these examples, which we have figured from Olbia (Pl. XXVIII. 7), both the ox-head (bukranion) and the sitting-hare (so favourite a type in South Gaulish Sigillata) are depicted upside down—an error in artistic preception which no true Hellene could possibly have perpetrated.<sup>5</sup>

Turning to Italy, the increasing favour with which relief wares were regarded in the peninsula during the Hellenistic period is indicated by the large *pyxides* so often found in South Italy with subjects in relief, coated with white slip and painted in pink and blue like the Hellenistic Canosa vases.<sup>6</sup>

The South Italian Megarian bowls by C. POPILIVS were made at Oriculum and Mevania in Umbria in the third century B.C., and were coated with slip varying from black to brown or even yellow in colour, but were not highly glazed. Sometimes, indeed, they are partly red and partly black, as at Pergamum. This South Italian relief ware was doubtless intimately connected with the Megarian bowls of Greece and Ionia, but it differed in such obvious particulars as the Latin names of its potters and the Roman lettering of their stamps. It likewise showed a marked poverty of design, as in the bowl by L. APPIVS (Pl. XXIII. 3), and it would appear that the Arretine potters borrowed few of their decorative elements from the makers of South Italian Megarian ware. On the other hand, many of the figure-subjects on Italian relief Sigillata were demonstrably derived from Neo-Attic reliefs and other Hellenistic sources. Now Hellenistic bas-reliefs in marble, metal or terra-cotta were particularly popular in Rome at the end of the Republic and in the Augustan age; bacchanalian subjects, borrowed from these reliefs, were in special favour with the Arretine and

figures in relief (Walters, *Ancient Pottery*, i. Pl. XLVII and p. 497), and the large relief jars of Sparta.

<sup>1</sup> Behn, *op. cit.* p. 22, No. 142; and Walters, *Ancient Pottery*, i. p. 500 footnote.

<sup>2</sup> Behn, *op. cit.* p. 27.

<sup>3</sup> *Hist. Nat.* xxxv. c. 12. In the same chapter he also mentions the manufactures of Erythraea, Cos, Adria, Rhegium and Cumae.

<sup>4</sup> Zahn, *Arch. Jahrbuch*, xxiii. 1908.

<sup>5</sup> A similar instance of inversion occurs in one of the Etruscan imitations of Greek painted vases at Caere, and this has been held to be clear evidence of local manufacture.

<sup>6</sup> Walters, *Ancient Pottery*, i. p. 201, and *Brit. Mus. Catal. of Terracottas*, D 204 and sqq.

Puteolan potters, and many of their figures and even groups are almost identical with those on marble vases, such as the Borghese vase or those by the Greeks Sosibios and Salpion. Figures of the Seasons (cf. Figs. 8 and 9 with Figs. 10 and 11 on Pl. XXXVI.), Maenads (cf. Fig. 27 with Fig. 28; Figs. 31 and 32 with Fig. 33 on Pl. XXXIII.), dancers (cf. Fig. 36 with Fig. 37 on Pl. XXXIII.), musicians (cf. Fig. 11 with Fig. 12 on Pl. XXXIV.), historical personages (cf. Fig. 15 with Fig. 16 M. PERENNIVS, Pl. XXXV.), and scenes in the Eleusinian mysteries (cf. Fig. 1 with Fig. 2 M. PERENNIVS on Pl. XXXVI.) were also adopted from the same or similar sources.

Convivial and erotic subjects were apparently derived to a great extent from Asia Minor, for identical scenes occur on Sigillata moulds found at Pergamum,<sup>1</sup> whilst some of the Maenads depicted on Arretine vases are similar to those of the Cybele relief found in that country.<sup>2</sup>

Finally, the highly naturalistic scrolls and decorative designs not infrequently found on the bowls of Italian Sigillata potters, such as PERENNIVS, CORNELIVS and ATEIVS, show remarkable affinities to the ornamental motifs of the Hellenistic "Alexander" sarcophagus and of the later *Ara Pacis Augustæ* (cf. Fig. 11 with Figs. 14, 15, 16, Pl. XXXI.; cf. also the similar design on the Hellenistic silver amphora found at Nikopol (Chertomlyk) in South Russia, Pl. XXVII. 2).

Hence the evidence in favour of a Hellenistic influence upon the art of the Arretine potters is overwhelming.

It has been shown that the provincial potter of Sigillata was indebted to Arretine and Hellenistic workers in ceramics, stone and metal for many of the forms of his vessels and decorative designs. It remains now to consider briefly whether this continuity in type, and more especially the ornamental *motifs*, can be traced back to earlier sources. Amongst the many *motifs* which lend themselves to such an enquiry, we may direct attention in particular to the following (Pl. XXXVII.):

A. *The St. Andrew's Cross Ornament*, which is so highly characteristic of decorated Terra Sigillata, has given rise to many surmises as to its origin and derivation. It may indeed eventually prove to be the key which will solve the question of some of the subsidiary sources of inspiration (other than Arretine) whence the South Gaulish potters derived their art, for it is a significant circumstance that this decorative *motif*, in its typical form, was not utilised by the potters of Arretium.

It would appear to be more than a mere coincidence that closely similar designs are found in the handle-ornaments of Greek vases (Pl. XXXVII. 1-3). Frequently these highly conventional designs of palmettes and cordate buds show a vertical conformation of the main stalks, but in the examples we have figured (Figs. 1-3) a distinctly diagonal arrangement is evident, and this is particularly the case in Fig. 2, a design by the well-known Athenian artist PAMPHAIOS. A comparison between this design and Fig. 4 from a

<sup>1</sup> Behn, *op. cit.* p. 27.

<sup>2</sup> Sabouroff Collection, Pl. CXXXVIII.



Claudian bowl, Form 29, by AOVITANVS, shows a close similarity, not only in the diagonal framework and the upper and lower palmettes, but also in the cordate buds, so that it is almost difficult to realise that a period of about 500 years separates the two designs. The circumstance that the fully developed *motif* of the St. Andrew's Cross occurs indeed at the very commencement of the South Gaulish Sigillata industry, as on a Tiberio-Claudian bowl by SENICIO (Knorr, *Terra Sigillata*, 1919, Pl. 75), is highly suggestive of the idea that the South Gaulish potter may have actually copied or adapted this design from Greek vases. The St. Andrew's Cross underwent considerable modifications in the course of its evolution in the Sigillata industry, but the main features of the vertically opposite palmettes and the lateral cordate buds frequently recur, as in the example by PASSENVS (Fig. 7). The corner tendrils of the South Gaulish Cross may also have been suggested by the lateral offshoots of the Greek ornament (cf. Fig. 1 with Figs. 6 and 7).

B. *The Nautilus Motif*. The characteristic volute ornament, which occurs on the lower frieze of Italian craters (Fig. 12) and of Tiberian and early Claudian examples of Form 29 (Figs. 13 and 14), has been tentatively described as a fern-frond and even as a fish-bladder! But in spite of our present ignorance of intermediate links in the chain of its evolution, our Figs. 8, 9 and 10 indicate that a more obvious origin for this *motif* is to be found in the curled tentacles of the Paper Nautilus which is so marked a feature of Mycenæan art. This theme had already become conventionalised at Mycenæ (Fig. 9), and this process is still more marked in the carving of the Kumbet tomb in Phrygia (Fig. 10). The cuttle-fish was also a favourite theme in Mycenæan art, e.g. the representation on a plate of beaten gold (Fig. 11), and its coiled arms may also have influenced the development of the volute ornament of early Sigillata bowls.

C. *Arrowheads*. Figs. 20-36 represent a series of this characteristic South Gaulish infilling of the concavities of scrolls, and the examples are selected in most cases from stamped bowls. It is clear, e.g. in a bowl by MEDDILLVS, Figs. 26 and 27, that some potters made use of more than one form of arrow-head, yet close and comparative examination of these small objects will probably be of much assistance in determining the maker of unsigned bowls. It would seem probable that this *motif* has been derived ultimately from the Egyptian lotus (Fig. 15). Lotus-borders from Rhodian plates (Figs. 16 and 19) seem to indicate how the reduction to the trifid arrow-head was brought about. In the specimen from Cameiros (Fig. 16, circa seventh century B.C.) the lotus has become reduced to three petals forming the "arrow-head" with two enveloping sepals, whilst in the still further simplified border of a Rhodian plate (Fig. 19) the sepals have disappeared, leaving an "arrow-head" with five rays. As a matter of pure form, it is a short step from this ornamental type to the South Gaulish

arrow-heads which (it may be noted) are depicted in the same relative position as the Mycenæan (Figs. 17 and 18) and Rhodian examples.

Although utilised for the same purpose as the "arrow-head" infilling, the imbricate pinnate leaf (Figs. 37-43)—so common in the decorated Sigillata of the Claudius-Nero period—does not appear to have been developed on the same lines. The imbricate pinnate leaf had already appeared on "Megarian" ware (Pl. XXIII. 4).

D. *Scale-pattern*. The scale-pattern was a favourite *motif* with the Mycenæan craftsmen, and was doubtless derived from beaten metal work, often inlaid (as in Fig. 46) with alabaster. It occurs on Mycenæan pottery (Figs. 47 and 48) sometimes with a central spot, and this was much in vogue on Corinthian vases (Fig. 49). The imbricating scales found on examples of Form 29 (Figs. 50 and 51; see also Pl. XXIX. 1) are highly reminiscent of Mycenæan art, and indicate the continuity of this ornamental *motif*. The open network of a Claudian bowl, Form 30, with a central rosette has distinct affinities with the early type, as shown in Figs. 48 and 49. A still later and debased development of this *motif* is figured on a Form 30 from Silchester (Fig. 53).

E. *Cuneiform Leaf and Stipule*. The genesis of this *motif* is difficult to trace. In the later stages of its South Gaulish development the leaf is markedly triangular with a curved strap-shaped bract or stipule and with three basal projections. In this form it is a favourite *motif* for festoons (Figs. 63 and 64) and scrolls (Fig. 65); but at its earliest appearance, in the time of Claudius and Nero, the leaf is relatively smaller and markedly heart-shaped (cordate), and the *motif* is used exclusively in scrolls. A conventional representation of an ivy wreath on an Augustan altar of Lusia Primigenia (Fig. 56) is the nearest Roman example of this *motif* that can be found. A comparison should also be made with the ivy wreath on the Greco-Etruscan mirror figured on Pl. XXVII. 9. Although the interval of time is indeed great, the similarity of the Mycenæan forms depicted in Figs. 54 and 55 is suggestive of some genetic relationship. In Fig. 54 we see not merely the strap-shaped stipule, but also three strokes which seem to correspond to the three projections at the base of the leaf in the South Gaulish examples. Probably this *motif* was also influenced by some plant-form familiar to the Sigillata potters.

F. *Pomegranates*. This *motif* on South Gaulish ware has been usually described as a poppy-head, but it bears a close resemblance to the pomegranate which was so favourite a *motif* in early art as an emblem of fertility. It is noticeable that both in the wreath (Fig. 72) and in the St. Andrew's Cross (Fig. 71 and Fig. 7) it was used by the Sigillata potter in groups of three, and this combination is seen in a painting of an Etruscan tomb (Fig. 69, c. seventh century) in which a female figure holds a branch with three pomegranates. We find the pomegranate frequently represented on Cyrenaic



bowls (Fig. 67), and it is known both in Assyrian (Fig. 66) and in Egyptian art (Fig. 68).

G. *Lanceolate Bud*. The lanceolate bud frequently occurs in scrolls of early examples of Form 29 (Fig. 74 OF BASSI COELI, Fig. 75 BALBUS F), and subsequently was frequently associated with festoons. It is a type which is clearly depicted in Greek art, for it is seen in the same form on a capital of the temple of Athene at Priene (Fig. 73).

H. *Cordate Bud*. This *motif*, which is of frequent occurrence on black- and red-figured Greek vases (Fig. 77 and Figs. 1 and 2), was also utilised by the Gaulish potters. On Sigillata it occurs mainly in the smaller form, but on some early examples of Form 30 it is found in larger form at the apex of an upright ornament ranged in series (Fig. 79, and see Pl. VIII. 1). It has wrongly been described as a copy of the flower of the Bleeding Heart (*Dielytra spectabilis*), although this flower is a native of Eastern Asia.

I. *Olive Wreath*. The olive wreath was a favourite *motif* on Greek vases, and was also utilised for beaten metal, e.g. on the large patera with the emblem of Africa from the treasure of Bosco Reale (Fig. 81). Here it is bordered by a bead-row, and in this association it was used in a debased form (the berries having lost their stalks) by South Gaulish potters for the upper frieze of early examples of Form 29, as in a Claudian example from Hofheim (Fig. 82).

J. *Straight or Chevron Wreath*. A straight wreath or repeated chevron *motif* was much in vogue with the Gaulish potters, especially as a lower border to the design in Form 37. Although it is so common a pattern that it may have been evolved independently at different periods, it is interesting to note a closely parallel representation both in design and in function on a beaked jug of Mycenæan art (cf. Fig. 83 with Figs. 84 and 85).

The foregoing examples furnish considerable evidence of persistence and continuity of ornamental type in ancient ceramic and allied arts, for it has been demonstrably shown that the South Gaulish potters employed—either consciously or subconsciously—certain *motifs* which were also common to the art of Greece, Ionia and ultimately to the naturalism of the Mycenæan period. The early history of the province, in which the Gaulish industry arose, warrants the inference that it was in some measure influenced by the art of the Phocæan colony of Massilia.



## CHRONOLOGICAL TABLE

	B.C. A.D.	
AVGVSTVS	27-14	Flourishing period of the Italian Sigillata industry. <i>Ara Pacis Augustæ</i> decreed B.C. 13, dedicated B.C. 9. Exportation of Arretine Sigillata to the Rhine frontier and slight sporadic infiltration into Britain.
TIBERIVS	A.D. 14-37	Commencement of the South Gaulish Sigillata industry. Exportation to the Rhine frontier.
GAIVS (Caligula)	37-41	Exportation of South Gaulish Sigillata to Britain during the Claudian invasion. Commencement of the Central Gaulish Sigillata industry, and rare exportation to Great Britain and other provinces.
CLAVDIVS	41-54	
NERO	54-68	During the period Claudius-Domitian the greater part of the Sigillata were imported into Britain was South Gaulish ; a certain amount of Central Gaulish ware, however, found its way into this island.
GALBA	68-69	
OTHO	69	
VITELLIVS	69	
VESPASIAN	69-79	
TITVS	79-81	Migration of Sigillata potters into East Gaul ; commencement of the East Gaulish industry.
DOMITIAN	81-96	
NERVA	96-98	Some East Gaulish ware exported to Britain.
TRAJAN	98-117	
HADRIAN	117-138	There is no evidence of any exportation of South Gaulish Sigillata subsequent to the reign of Trajan.
ANTONINVS PIVS	138-161	
MARCVS AVRELIVS }	161-169	During the reign of Hadrian and down to the end of the Antonine period Britain received its chief supply from Central Gaul ; but there was also a very considerable East Gaulish importation.
LVCIVS VERVS }	169-177	
MARCVS AVRELIVS }	177-180	
MARCVS AVRELIVS }	180-192	
COMMODYS	180-192	From the termination of the Antonine period downwards to the practical end of the Sigillata industry (about 260 A.D.) there is little, if any, evidence of the importation of moulded Sigillata from Central Gaul. A certain amount of ware with applied reliefs, incised, barbotine and rouletted decoration found its way into Britain in the first half of the third century, and some of this is traceable to Lezoux as well as to East Gaul.
PERTINAX	193	
DIDIVS IVLIANVS	193	
SEPTIMIVS SEVERVS	193-198	
SEPTIMIVS SEVERVS }	198-209	
ANTONINVS (Caracalla) }	198-209	
SEPTIMIVS SEVERVS }	209-211	
ANTONINVS (Caracalla) }	209-211	
GETA	211-212	
ANTONINVS (Caracalla) }	211-212	
GETA	212-217	
ANTONINVS (Caracalla)	212-217	

	A.D.	
MACRINVS	217-218	}
MACRINVS		
DIADVMENIANVS	218	}
ANTONINVS		
(Elagabalus)	218-222	}
SEVERVS ALEXANDER	222-235	
MAXIMINVS THRAX	235-238	}
GORDIAN I		
GORDIAN II	238	}
PVPIENVS		
BALBINVS	238	}
GORDIAN III	238-244	
PHILIPPVS ARABS	244-247	}
PHILIPPVS ARABS		
PHILIPPVS (junior)	247-249	}
DECIVS		
TREBONIANVS GALLVS	249-251	}
VOLVSIANVS		
AEMILIANVS	251-253	}
VALERIANVS		
GALLIENVS	253	}
GALLIENVS	253-260	
GALLIENVS	260-268	}

There is, however, evidence that some of the late moulded Sigillata of East Gaul was imported into Britain in the first half of the third century.

A considerable amount of stamped (or Marne) ware found its way into Britain in the later years of the third century and in the fourth century.

Destruction of the chief Sigillata potteries of East and Central Gaul by the inroads of Germanic tribes.

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## APPENDIX

### I. *Italian Sigillata Potters*

#### (a) Note to pp. 5, 6:

In this work the term "Italian" is applied to all Sigillata potters whose fabric is characterized by a definitely Arretine or Puteolan technique; and for this reason we have included in our list the stamps APROI, PILEMV and SILVA, which have been found at Silchester.

It is, however, a moot point whether all ware of an Italic character was produced exclusively in the peninsula. It is indeed possible that the potter who used the stamp SILVA may be identical with the South Gaulish SILVANVS whose ware occurs at Mainz in the Tiberio-Claudian period (Pl. XLII. 8), notwithstanding the fact that SILVA is found on Form 27 with the distinctly Italian technique of a rouletted wall. In like manner APROI may be an early impression of the potter L. APRONIVS of Montans.

If, again, we take the much-discussed case of the potter ATEIVS, it has been contended by Oxé (*Bonn. Jahrbh.* ci. p. 22 sqq.), Ritterling (*Mitt. d. Altertums-Komm. f. Westfalen*, ii. p. 142) and Walters (*Proc. Camb. Antiq. Soc.* xii. p. 111) that he either worked exclusively in Gallia Narbonensis or at least had a factory there. There is, however, no direct evidence to this effect, and the circumstantial details furnished by these authorities in support of their contention are by no means convincing. Thus it has been stated that the practice of ATEIVS in stamping his decorated vessels on their basal interior is unknown in Arretine ware. But, as Loeschcke (*Haltern*, pp. 129, 130) has pointed out, the use of the interior stamp in decorated vessels was occasionally practised by many Italian potters, including some belonging to the best period of Arretium, such as M. PERENNIVS/TIGRANVS.<sup>1</sup> It will therefore be evident that the interior stamp of the Gaulish Form 29 was no innovation. Furthermore the South Gaulish potter occasionally followed the more prevalent vogue of the Italian potters and stamped his decorated bowls, Forms 11 and 29, on their exterior, e.g. VOLVS (Pl. XIX. 1, Form 11, and Pl. XXVI. 5, Form 29), MYRRANVS and FRONTIVS (Colchester), MOMMO (Pompeii).


The work of the potter ATEIVS is of such a distinctly Italic character and his designs are frequently of so high an order (cf. Pl. II. 3) that, in the absence of evidence to the contrary, we are compelled to assume an Italian environment. His acanthus scrolls bear a marked resemblance to those of the *Ara Pacis Augustae* (cf. Pl. II. 4 with Pl. XXV. 9), whilst his storks find their counterpart in the toreutic art of the Augustan period as found at Bosco Reale (cf. Pl. II. 3 with Pl. XXII. 11).

The cup stamped ATEI *in planta pedis* (Pl. XL. 2), which was found at Southwark, possesses a technique closely approximating to that of Augustan Italic Sigillata. It should be dated to the reign of Tiberius.

At the same time, there appears to be some evidence of a migration of Italian potters into South Gaul, as indicated by the following table:

<sup>1</sup> It has been conjectured, but on quite inadequate grounds, that the inscription M. PERENNI/TIGRANI denotes a single potter and not a master and slave.

*Italian.**South Gaulish.*

- ACVTVS: Geissner, i. No. 1; Italic character of plain ware (p. 11). Tiberio-Claudian Form 29 (Pl. XXVI. 6).  
*C.I.L.* xiii. 5; *Bonn. Jahrb.* cii. p. 141; slave of Publius.
- ALBANVS: slave of L. Annius. Ritterling (*Mitt. d. Altertums-Komm. f. Westfalen*, ii. p. 145) considers that ALBANVS of South Gaul may be identical with the Italian potter. If we may equate him with ALBINVS (cf. Silvanus and Silvinus), then much of his decorated work belongs to the Tiberio-Claudian period (Knorr, *Terra Sigillata*, 1919, Pl. 1, A and B).
- FELIX: slave of Naevius or of Aemilius, with the stamps FELIX FECIT, FELIX FEC, EPOEI FELIX. In Italian ware his stamp is frequently given as <sup>FELI</sup>  
, e.g. at Xanten and Haltern.
- INGENVVS: slave of L. Annius. Early decorated work of the Tiberio-Claudian period (Knorr, *op. cit.* Pls. 40, A, B; 41 F).
- IVCVNDVS: slave of L. Titius. Early decorated work of the Tiberio-Claudian period (Knorr, *op. cit.* Pl. 43 B, c).
- SALVVS: slave of Ateius. Italic character of his work (p. 11). Early plate with spiral handles at Mainz (Pl. XLII. 10 SALVETV).
- SILVA.  
 M. VALERIVS; VALERIVS F. SILVANVS (*v. supra*). The decorated ware of the South Gaulish potter VALERIVS belongs to the Tiberio-Claudian period (Knorr, *op. cit.* Pl. 81).
- VOLVSENVS; C. VOLVS. The South Gaulish potter VOLVS copied the Italian Form 11 (Pl. XIX. 1). His work belongs to the Tiberio-Claudian period (Pl. XXVI. 5). See also Déchelette, i. p. 68).
- VITLVS: slave of Naevius. The case of VITLVS is discussed on pp. 9, 10.

This list might be extended, but it is sufficient to show that a certain number of South Gaulish potters bore names closely similar to those of Italian workers in Sigillata, that many of these potters produced early work in South Gaul, and that some of them are obviously transitional, as shown by the suffix FECIT or EPOEI. It will be noticed that many of these Italian potters were slaves, and it is conceivable that a number were liberated and subsequently migrated to the seat of the rising industry in Gaul. That such a process of liberation took place is attested by the stamp c. MEMM. c. L(iberti). MAHE and other examples.

## (b) Note to p. 7:

A good example of ornamental design by M. PERENNIVS/TIGRANVS is illustrated by Chase, *Cat. of Arretine Pottery*, Museum of Fine Arts, Boston, Pl. XXII. III.

## (c) Note to pp. 87, 88:

In Italian decorated Sigillata a deep and nearly cylindrical bowl by M. PERENNIVS and BARGATES closely approximates to the Gaulish Form 30 (see Chase, *op. cit.* Pl. I. 128 M. PERENN/BARGATHI). It possesses a rudimentary footstand, and its decoration embodies the elements of the St. Andrew's Cross ornament.

## (d) Note to p. 151 :

The *corded* tongue is occasionally met with in Italian Sigillata (Chase, *op.cit.* Pl. XX. 104 M. PERENNI/BARGATHI).

## (e) Note to p. 189 :

A still closer approximation to Form 33 than Loeschke Type 10 A is forthcoming at Xanten in the cup without a lip by the early Italian potter L.S.G. (Hagen, *Einzel-funde von Vetera*, 1910-12, Pl. LV. 1).

II. *Prototypes of Gaulish Figure-designs.*

Note to pp. 138 and 140 :

Compare in this connection the figure of the sacrificial servant on the frieze of the *Ara Pacis Augustae* (Wickhoff, *Roman Art*, Pl. II.), which recurs on early Gaulish fabric (Déch. i. Fig. 4), but in a reversed position. In the Augustan representation she looks to the right and carries the offerings in her left hand and a jug in her right hand. In the Gaulish fragment she is depicted looking to the left and carrying the "offerings" in her right hand and the jug in her left hand. This reversal of posture—either partial or complete—by the Gaulish imitator is not infrequent, and we have figured several examples (cf. Fig. 38 with Fig. 39 on Pl. XXXIII. ; Fig. 38 with Fig. 39 on Pl. XXXIV. ; Fig. 20 with Figs. 21 and 22 on Pl. XXXV. ; Fig. 23 with Fig. 24 on Pl. XXXV. ; Fig. 12 with Fig. 13 on Pl. XXXVI.).

On the above-mentioned pages we have noted the comparative infrequency with which the figure-types of Provincial Sigillata can be traced back to Arretium. As this subject is of considerable developmental interest, we indicate here a few examples of types which were common both to Italian and Provincial Sigillata, for they would appear at first sight to demonstrate some genetic relationship—in the representation of figures—between these ceramic centres. It is, however, an open question whether these particular Gaulish figure-types owed their inspiration directly to Arretium or whether their origin should not be sought in a common source which strongly influenced the ceramic art of the period, viz. Neo-Attic reliefs, Hellenistic sculpture and toreutic vessels. In an art of so eclectic a character it is indeed probable that all these sources were drawn upon, but we would point out that some of the types enumerated here bear a much closer resemblance to the Hellenistic reliefs than to the designs of the Arretine potters :

*Italian Sigillata.**Provincial Sigillata.*

<i>Apollo Citharædus</i> ; Chase, <i>op. cit.</i> Pls. III. 1,	Pl. X. 2, Pl. XXXIV. 10.
IV. 2.	
<i>Nike or Victory</i> ; Chase, <i>op. cit.</i> Pls. III. 1, VI. 3.	Pl. XXXIV. 9.
<i>Diana and bow</i> ; Chase, <i>op. cit.</i> Pl. XXIII. 4.	Pl. XXXIV. 14.
<i>Birth of Dionysus</i> ; Pl. XXXVI. 2 TIGRANVS.	Pl. XXXVI. 5.
<i>Meleager and boar</i> ; Chase, <i>op. cit.</i> Pl. XXVI.	Pl. XXXVI. 15.
79 ; cp. also our Pl. XXXVI. 14.	
<i>Siren</i> ; Chase, <i>op. cit.</i> Pl. XXIV. 27.	Pl. XXXIII. 8.
<i>Figure with torch and thyrsus</i> ; Pl. XXXIII. 35.	Pl. XXXIII. 25, 26.

III. *Rare Examples of Decorated Sigillata.* Pl. LXXXV.

Figs. 1 and 2 represent fragments of a large jug, apparently about 50 cm. in height, representing a type similar in all likelihood to Déchelette Form 62 (Fig. 3), which, however, is known only in green glaze from St. Rémy. It had probably a narrow neck, for the interior is free from glaze, and it was made from two moulds, the two halves being joined together on the potter's wheel and the line of junction smoothed over at the largest diameter.



The fragment from Hartlip, Kent (C. R. Smith, *Collect. Antiq.* ii. p. 13), fortunately still bears a potter's mark, SABINI M, and the details of the decoration, such as the pinnate leaf, indicate that it may be ascribed to the Nero-Vespasian period. The figures, however, such as Diana, Leda and Abundance, are characteristic of the Flavian period at Rottweil, e.g. the figure of Abundance is known (on a smaller scale and therefore presumably of later date) on a Form 78 at Rottweil, whilst the warrior with his hand upraised in salutation occurs on a Form 30 in the style of GERMANVS at Vindonissa. The Victory is of a hitherto unknown type.

In Fig. 1 from Vindonissa (Knorr, *Aislingen*, Textfig. 5) only a portion of the potter's mark is preserved, but a comparison with the Hartlip specimen renders it likely that this fragment also proceeded from the workshop of SABINVS. Other points of similarity between the two vessels are the use of a chevron arcade combined with the astragalus motif. In both cases there are resemblances to the work of GERMANVS, with whom SABINVS must have been closely associated, as indeed Knorr (*Terra Sigillata*, 1919, p. 72) has already indicated, e.g. the figure of the warrior, the chevron arcade, the row of palmate leaves, and the striated club-shaped ornaments. The long, upright, pinnate ornament on both sides of the arcade in Fig. 1 is also used by AMANDVS (Tiberius-Claudius period) and by MYRRANVS (Claudius to Early Vespasian).

Other fragments of similar jugs are known from Rottweil (Knorr, *Terra Sigillata*, 1919, Textfig. 32) and from Augsburg.

The fragment from Nymegen (Fig. 4) is designated a field-flask by Knorr (*op. cit.* Textfig. 33). The same decoration occurs on both sides, and may be ascribed to the period Nero-Vespasian, e.g. the lion is used by the potters COELVS, L. COSIVS, MASCLVS, MOMMO, PASSIENVS, RVFINVS and SASMONOS. The lyrate bud on the corner tendrils is used by VIRILIS. This vessel may have approximated to the flat-sided circular jug, Déchelette Form 63 (Fig. 5), although this is only known in green glaze from Vichy.

Finally, Fig. 6 represents an ape's head from Mainz (Behn, *Röm. Keramik*, Abb. 18), of which two examples, apparently forming part of a vessel, occur in the Marx collection; and Fig. 7 is a lamp in the Guildhall Museum, London (Catal. Pl. IX. 5), representing a negro's head when seen from above and a camel's head when viewed laterally.

#### IV. Persistence of certain types of Sigillata into the Fourth Century.

Reference has already been made in preceding pages to the persistence of certain forms (e.g. Forms 34, 45, stamped ware, &c.) into the Fourth Century. A recent publication (W. Unverzagt, *Die Keramik des Kastells Alzei, 330-410 A.D.*) confirms these references and lays stress on the revival of the Sigillata industry at Avocourt, Lavoye and Les Allieux in the Fourth Century.

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 (ii) VERECVNDVS, 26-8, 29, 125, 186, 211, 214.  
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- (I) XANTHVS, 5-7, 9, 10, 145, 150, 154, 160,  
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- (I) ZOILVS, 5.

# PLATES

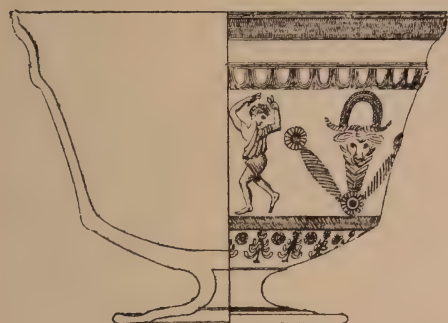


## PLATE II.

### ITALIAN SIGILLATA.

1. Form II. Stamped  $\frac{\text{CRESTI AE}}{\text{EVHODI}}$  int.) Haltern. Hähnle, *Haltern*, Taf. VII. 6 a-c.
2. Form II. Stamped  $\begin{array}{c} \text{CN. AEI} \\ \leftarrow\leftarrow\leftarrow\leftarrow \\ \text{XANTHI} \end{array}$  (int.), XANTHI (ext.) Foxton, Cambridgeshire.  
Walters, *Camb. Antiq. Communic.* xii. (1906-7), p. 107.
3. Form II. Stamped ATEI (int.) Mainz. Behn, *Röm. Keramik*, Taf. III. 2.
4. Form II. Stamped  $\begin{array}{c} \text{CNAEI} \\ \rightarrow\rightarrow\rightarrow\rightarrow \\ \text{XANTHI} \end{array}$  (int.), XANTHI (ext.) Mainz. Behn, *op. cit.* Taf. III. 1.
5. Cylindrical vase. Stamped M. PEREN and TIGRANI. Arezzo. Brit. Mus. (L 95).  
(*Ad nat.*)
6. Cylindrical "Megarian" bowl, red unglazed. Isle of Melos. Brit. Mus. (G 96).  
(*Ad nat.*)
7. Hemispherical bowl. Cast of mould in Brit. Mus. 428. (*Ad nat.*)
8. Hemispherical bowl. Arezzo (Loeb Coll.) M PERENNI and NICEPHOR. Chase,  
*Loeb Coll.*

Scale  $\frac{1}{3}$ .



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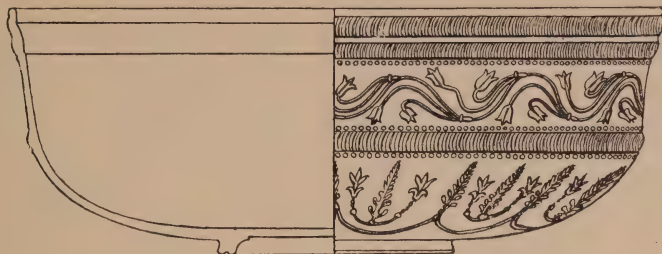
PLATE III.

DRAGENDORFF FORM 29.

1. Tiberian form. Hofheim. Ritterling, *Hofheim*, Taf. XXXII. 17 A.
2. Claudian form. Hofheim. Ritterling, *op. cit.* Taf. XXXII. 17 B.
3. Flavian form. Stamped OF IVCVN. Rottweil. Knorr, *Rottweil*, 1907, Pl. II. 2 (restored).
4. Tiberian form. Stamped OFIC BILICATI. Mainz. Behn, *Sammlung Ludwig Marx*, Pl. VIII. 2.
5. „ „ Stamped SENICIO F. Mainz. Ritterling, *op. cit.* Abb. 49.
6. „ „ Stamped SCOTIVS. Mainz. Ritterling, *op. cit.* Abb. 50.
7. „ „ Stamped with an 8-bladed rosette. Strasbourg. Henning, *Strasbourg*, Pl. XX. 1.
8. Tiberius-Claudius form. Stamped CATL[ . Strasbourg. Henning, *op. cit.* Pl. XX. 3.
9. Claudian form. Stamped OF AQVITANI. Vindonissa. Knorr, *Aislingen*, Pl. XVII. 4 (restored).

Scale  $\frac{1}{3}$ .

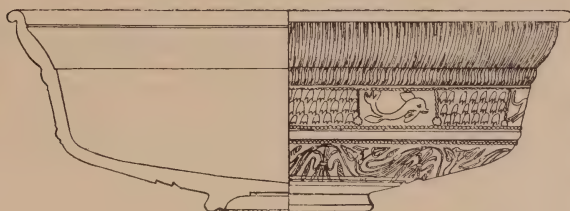




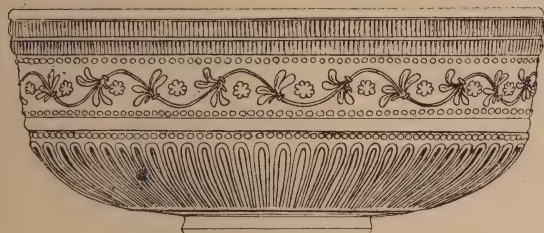
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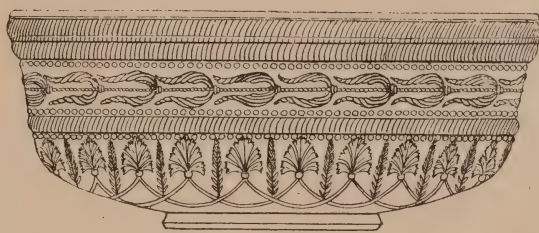
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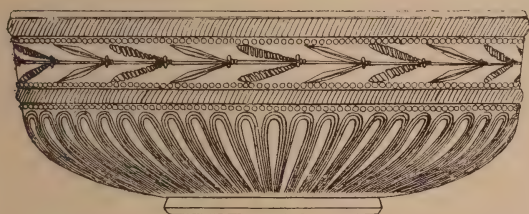
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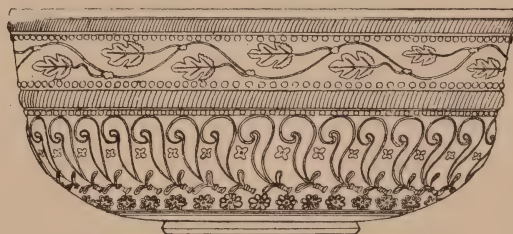
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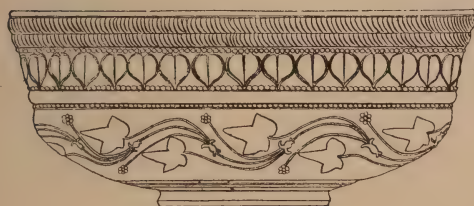
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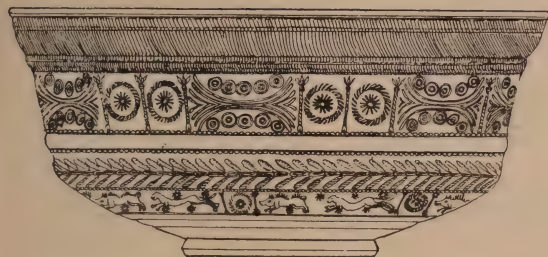
PLATE IV.

DRAGENDORFF FORM 29.

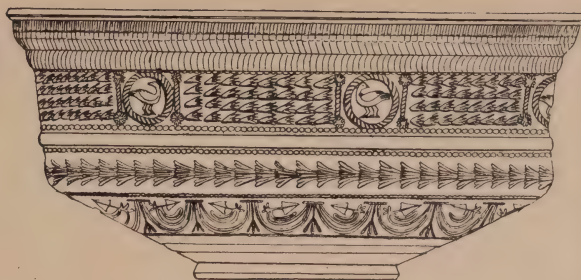
1. Stamped OF BASSI CO[. Strasbourg. Henning, *Strasbourg*, Pl. XX. 6.
2. „ OF PASSIENI. Hofheim. Ritterling, *Hofheim*, Pl. XXIII. 3.
3. „ OF PASSEN. London. Walters, *C.R.P.* Pl. XXII. (M 352).
4. „ LICINVS F. Hofheim. Ritterling, *op. cit.* Pl. XXIII. 2.
5. „ OF PRIMI. Hofheim. Ritterling, *op. cit.* Pl. XXIII. 4.
6. Style of SEVERVS. Rottweil. Knorr, *Rottweil*, 1912, Pl. II. 1, 2 (restored).
7. Stamped VITA. Strasbourg. Henning, *op. cit.* Pl. XXI. 2.
8. „ GERMANI OF. Strasbourg. Henning, *op. cit.* Pl. XX. 7.
9. „ ME~~S~~ILLVS. London. Walters, *C.R.P.* Pl. XX. (M 308).
10. Torre Annunziata. Walters, *C.R.P.* Pl. X. (M 18).

Scale  $\frac{1}{3}$ .

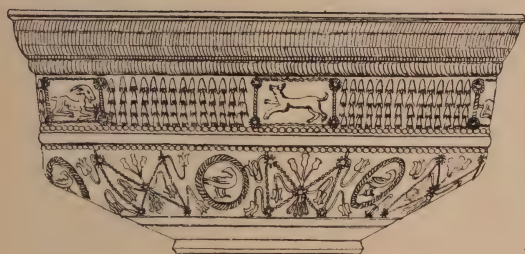




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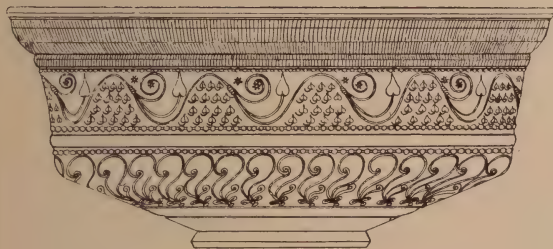
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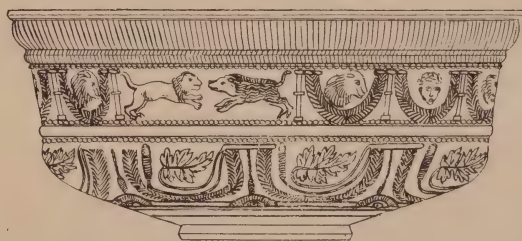
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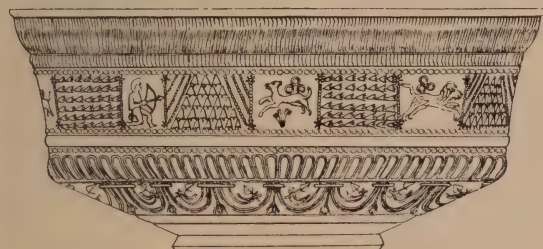
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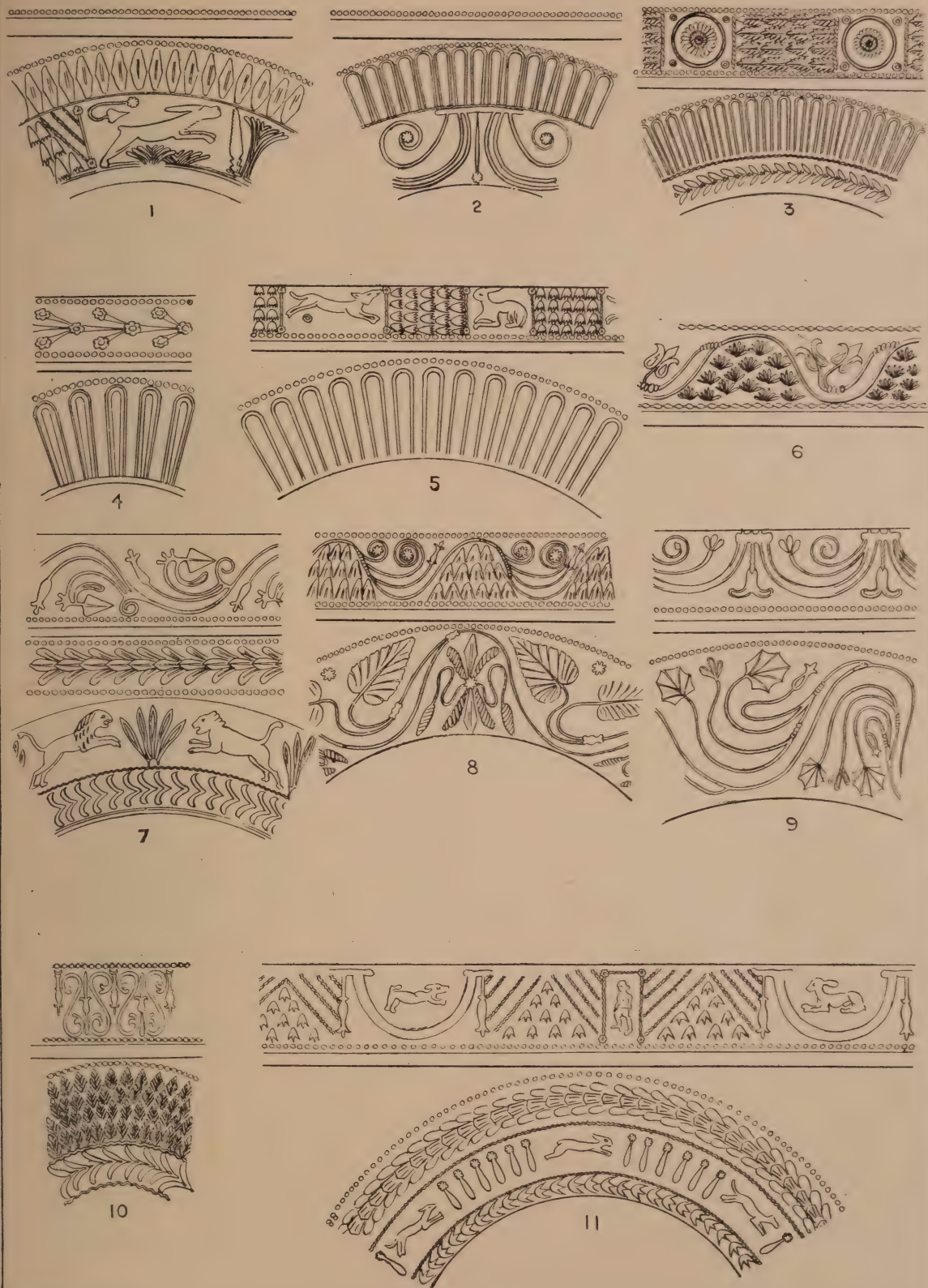


## PLATE V.

### DRAGENDORFF FORM 29, DECORATIVE DETAILS.

1. Rottweil. Knorr, *Rottweil*, 1912, Pl. VI. 13.
2. „ By VIRILIS. Knorr, *Rottweil*, 1907, Pl. I. 10.
3. Aislingen. By ARDACVS. Knorr, *Aislingen*, Pl. XVII. 3.
4. Pompeii. By VITALIS. Atkinson, *Pompeii*, No. 26.
5. „ By MOMMO. Atkinson, *Pompeii*, No. 7.
6. Margidunum. Early ditch (II). *Ad nat.*
7. Pompeii. By RVFINVS. Atkinson, *Pompeii*, No. 36.
8. Aislingen. By CARILLVS. Knorr, *Aislingen*, Pl. VIII. 3.
9. Pompeii. By VITALIS. Atkinson, *Pompeii*, No. 27.
10. London (British Museum). Walters, *C.R.P.* M 1014.
11. Pompeii. By RVFINVS. Atkinson, *Pompeii*, No. 35.

Scale  $\frac{1}{2}$ .



## PLATE VI.

### DRAGENDORFF FORM 29, DECORATIVE DETAILS.

1. Hofheim I. Ritterling, *Hofheim*, Pl. XXIV. 2.
2. Aislingen. Stamped BASSI OF. Knorr, *Aislingen*, Pl. IV. 1.
3. Carlisle. Stamped OF CREST[. Bushe-Fox, *Arch.* 64, No. 8.
4. Pompeii. By MOMMO. Atkinson, *Pompeii*, No. 11.
5. Newstead I. Curle, *Newstead*, p. 205, 1.
6. Hofheim. Ritterling, *Hofheim*, Pl. XXIV. 10.
7. Carlisle. Stamped NIGRINI. Bushe-Fox, *op. cit.* No. 4.
8. Pompeii. By MANDVILVS. Atkinson, *op. cit.* No. 31.
9. Newstead I. Curle, *op. cit.* p. 205, 8 (restored).
10. Pompeii. By MOMMO. Atkinson, *op. cit.* No. 24.
11. Wroxeter. Stamped OF COTOI. Bushe-Fox, *Wroxeter*, 1912, Pl. XIII. 1.
12. Rottweil. Knorr, *Rottweil*, 1912, Pl. IV. 3.

Scale  $\frac{1}{2}$ .



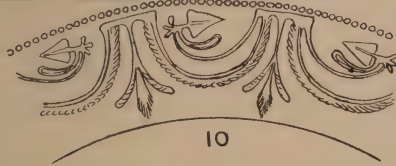
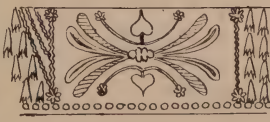
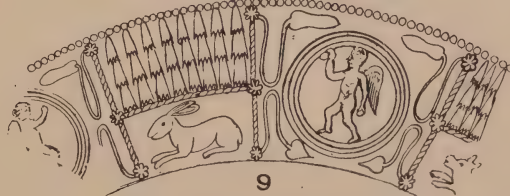
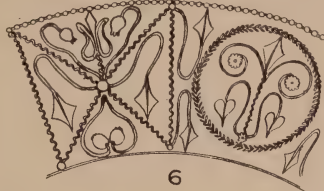
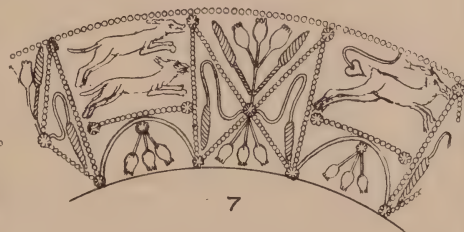
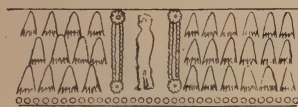
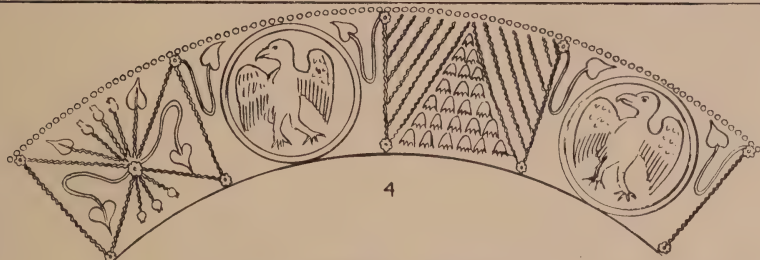
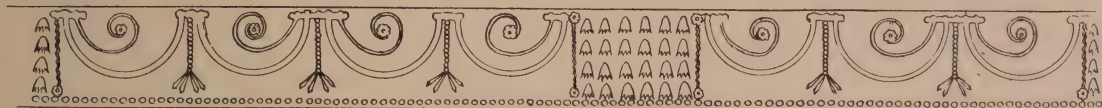
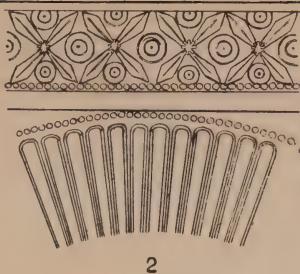
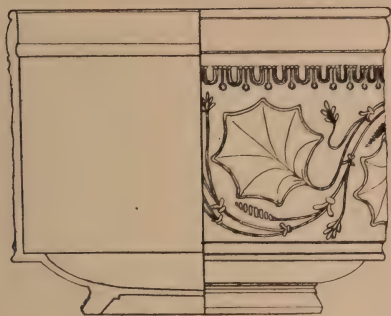


PLATE VII.

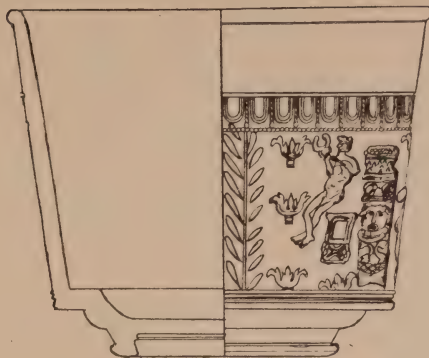
DRAGENDORFF FORM 30.

1. Hofheim I. Ritterling, *Hofheim*, Pl. XXVI. 5, and XXXII. 18.
2. Newstead. Curle, *Newstead*, Pl. XXXIX. 9.
3. London. Walters, *C.R.P.* M 1050, Pl. XXVII.
4. Marienborn near Mainz. Ascribed to ALBILLVS of La Madeleine. Fölzer, Pl. II. 21.
5. Hofheim. Ritterling, *Hofheim*, Pl. XXVI. 4.
6. Strasbourg. Henning, *Strasbourg*, Pl. XIX. 7.
7. Hofheim. Ritterling, *Hofheim*, Pl. XXVI. 3.

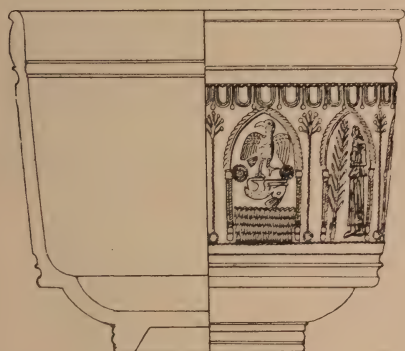
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1



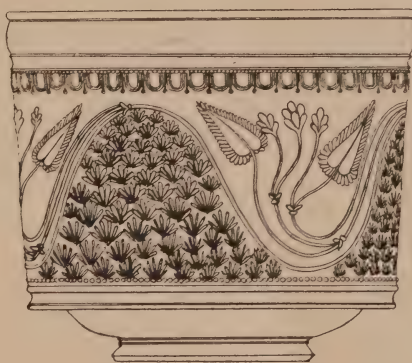
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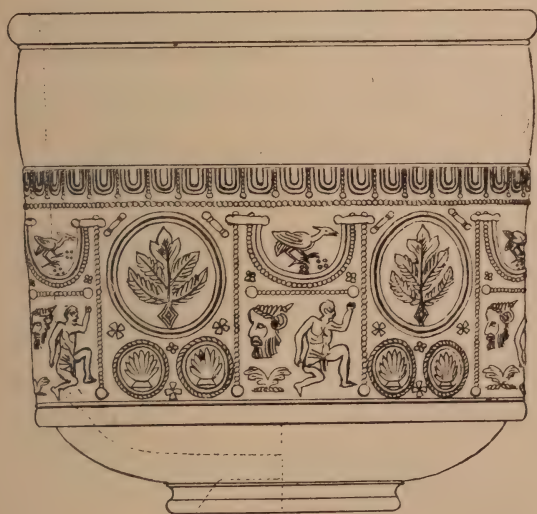
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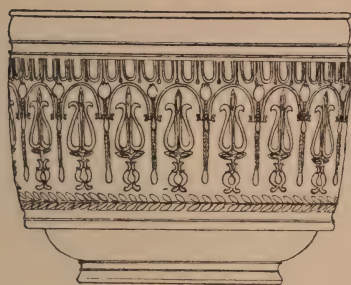


PLATE VIII.

DRAGENDORFF FORM 30.

1. Strasbourg. Henning, *Strasbourg*, Pl. XIX. 2.
2. Vienna. Stamped MASCLVS F. Knorr, *Aislingen*, Text Fig. 2.
3. Sandy, Bedfordshire (British Museum). Walters, *C.R.P.* Pl. XXVI. M 401.
4. Rottweil. Knorr, *Rottweil*, 1912, Pl. XVI. 1.
5. London. Walters, *op. cit.* M 1077.
6. Strasbourg. Henning, *op. cit.* Pl. XIX. 4.
7. London (British Museum). *Ad nat.*
8. Westerndorf. Hefner, Die röm. Topferei in Westerndorf, *Oberbayrische Archiv*, 1863, Pl. IV. 5.

Scale  $\frac{1}{3}$ .



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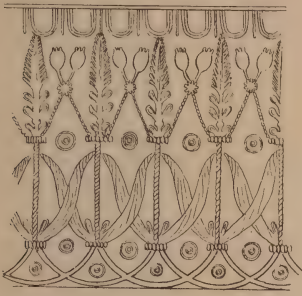
## PLATE IX.

### DRAGENDORFF FORMS 30 AND 11, DECORATIVE DETAILS.

1. Hofheim. Ritterling, *Hofheim*, Pl. XXVII. 23.
2.     "             "     "     "     Pl. XXVII. 5.
3.     "             "     "     "     Fig. 46, 1. Form 11.
4. London, King William Street. By MASCLVS. *Ad nat.*
5. Margidunum. *Ad nat.*
6. Rottweil. Stamped GERMANI. Knorr, *Rottweil*, 1907, Pl. VI. 1 (restored).
7.     "             Knorr, *Rottweil*, 1907, Pl. XIII. 3 (restored).
8.     "             "     *Rottweil*, 1912, Pl. XVI. 2.
9.     "             Stamped PAVLLI. Knorr, *Rottweil*, 1907, Pl. XIV. 7.
10. Newstead. Curle, *Newstead*, p. 205, 10.

Scale  $\frac{1}{2}$ .





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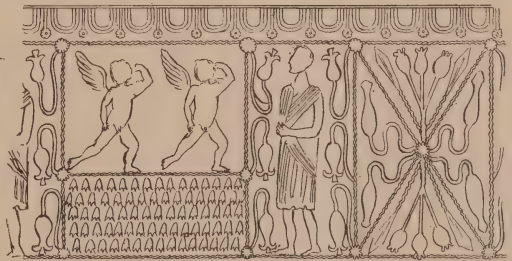
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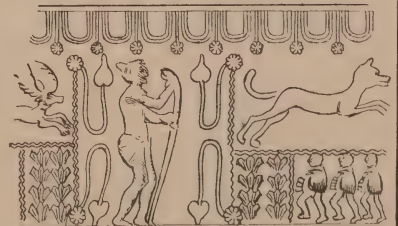
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PLATE X.

DRAGENDORFF FORM 30, DECORATIVE DETAILS.

1. Hofheim. Ritterling, *Hofheim*, Pl. XXVII. 20.
2. London. Walters, *C.R.P.* M 421.
3. Colchester. In style of MASCLVS. *Ad nat.*
4. Rottweil. Stamped GERMANI. Knorr, *Rottweil*, 1912, Pl. XII. 21-24 (conjoined).
5. Colchester. *Ad nat.* Probably Pre-Claudian.
6. Regensburg. Stamped COBNERTVS F. Walderdorff, *Verh. d. hist. Ver. f. Oberpfalz*, 1898, p. 115.
7. Newstead II. Curle, *Newstead*, p. 227, 6 (restored).
8. Wroxeter. In style of CIBISVS of Heiligenberg. Bushe-Fox, *Wroxeter I.* Pl. XV. 17.
9. Silchester. May, *Silchester*, Pl. XV B.
10. Trèves. Fölzer, Pl. XII. 19.

Scale  $\frac{1}{2}$ .





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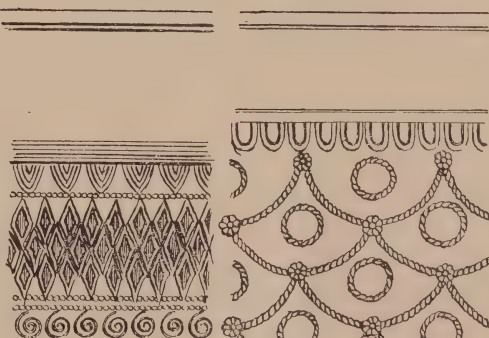
4



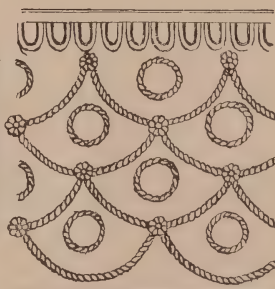
5



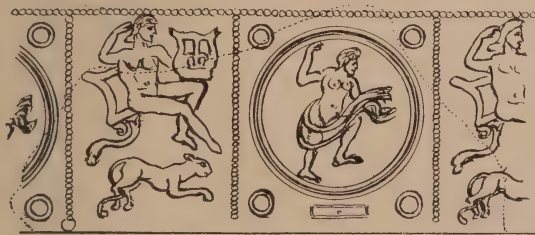
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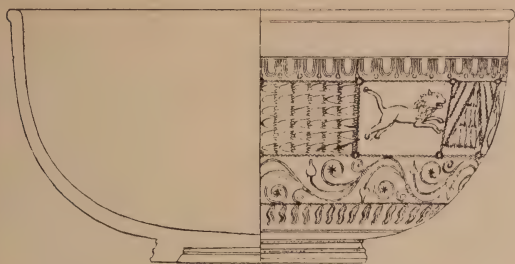


PLATE XL.

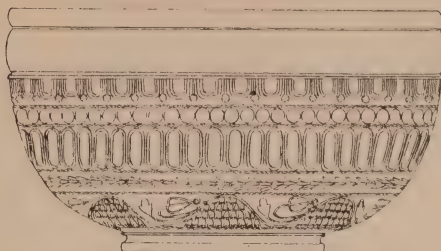
DRAGENDORFF FORM 37.

1. Hofheim II. Ritterling, *Hofheim*, Pl. XXXII. 19.
2. Newstead I. Curle, *Newstead*, Pl. XL. 13.
3. Newstead II. Curle, *op. cit.* Pl. XL. 14.
4. Niederbieber. Oelmann, *Niederbieber*, Pl. I. 17.
5. Marne valley. Déchelette II. Pl. XI. 2.
6. Pompeii. Déchelette I. Fig. 64.
7. Rottweil. Stamped GERMANI. Knorr, *Rottweil*, 1907, Pl. VIII. 1 (restored).
8. Newstead I. Curle, *op. cit.* Pl. XLI. 14.

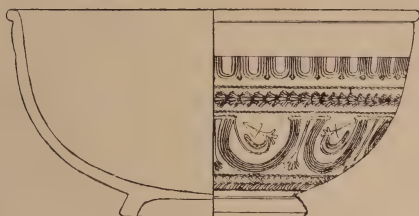
Scale  $\frac{1}{8}$ .



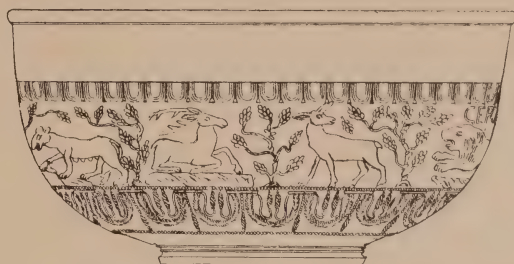
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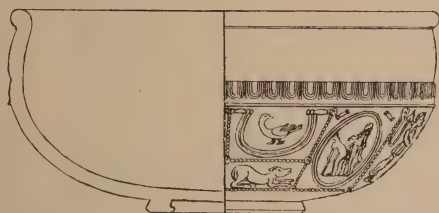
6



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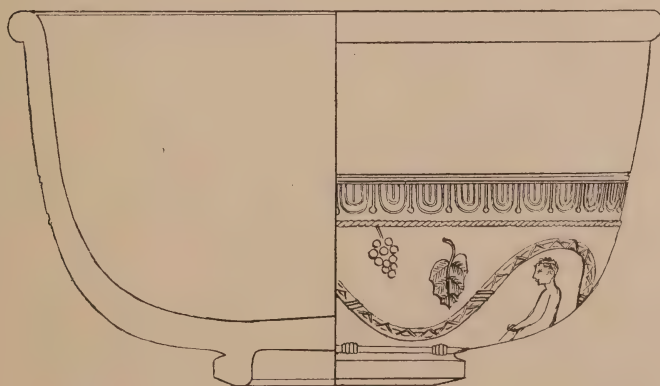
7



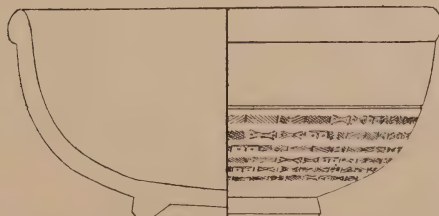
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PLATE XII.

DRAGENDORFF FORMS 37 AND 29/37.

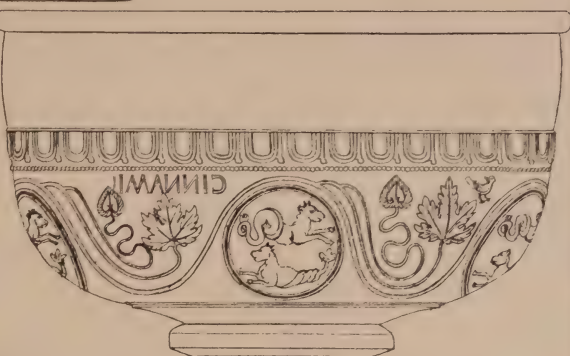
1. Wingham, Kent. Stamped PATERNI. Walters, *C.R.P.* Pl. XXXI. M 1463.
2. Auvergne. Stamped BVTRIO. Walters, *op. cit.* Pl. XI. Fig. 2, M 62.
3. „ Stamped CINNAMI. Déchelette I. Pl. XI. 2.
4. Newstead. Stamped CINNAMI. Curle, *Newstead*, Pl. XLIV.
5. Baden-Baden. By the “ potter of the small medallion ” of Heiligenberg. Knorr, *Rottenburg*, Pl. VIII. 8 (restored).
6. Köngen. Stamped REGINVS F. Knorr, *Cannstatt*, Pl. XXXVII. and Text Fig. 1 (restored).

Scale  $\frac{1}{3}$ .

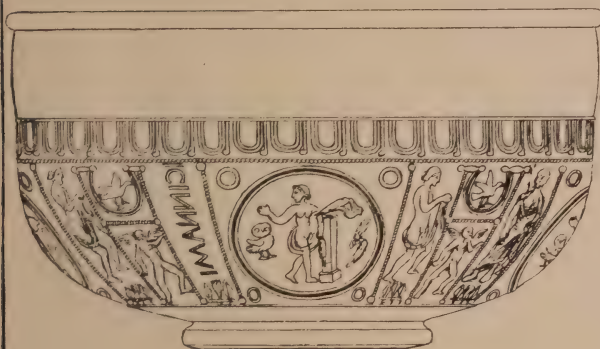




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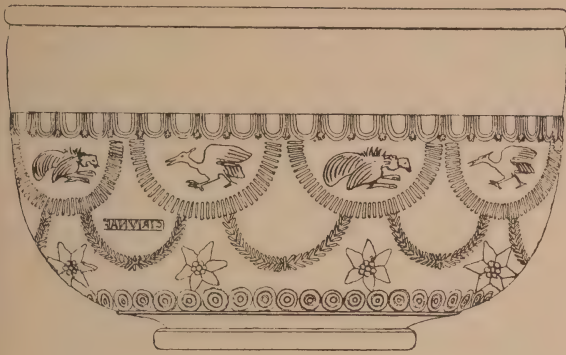
6

PLATE XIII.

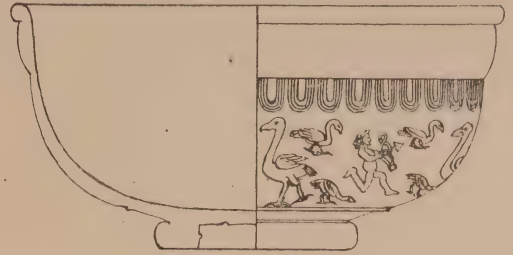
DRAGENDORFF FORM 37.

1. Cannstatt. Stamped CIRIVNA F. Knorr, *Cannstatt*, Pl. VIII. 1 (restored).
2. Unterweissach. Stamped IANV F. Knorr, *Cannstatt*, Pl. XXVI. 3 (restored).
3. Rottenburg. In style of IANVS. Knorr, *Rottenburg*, Pl. X. 1 (restored).
4. Rheinzabern. Stamped COMITIALIS F. Ludowici BSc.
5. Rottweil. Stamped CIBISVS FEC. Knorr, *Rottweil*, 1907, Pl. XXII. 1 (restored).
6. Wald Bossert. Stamped B. F. ATTONI. Knorr, *Cannstatt*, Pl. XVIII. 1 (restored).
7. Strasbourg. Stamped VALENTIN. Henning, *Strasbourg*, Pl. XXII. 7.

Scale  $\frac{1}{3}$ .



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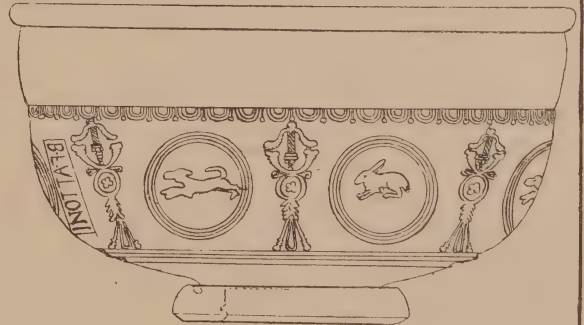
2



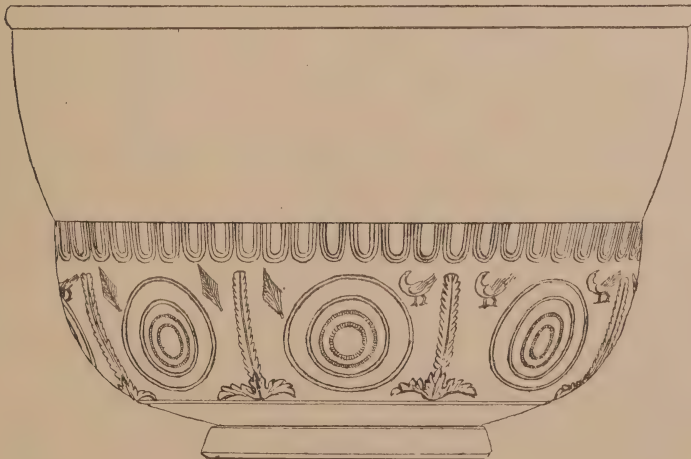
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PLATE XIV.

DRAGENDORFF FORM 37, DECORATIVE DETAILS.

1. Newstead I. Curle, *Newstead*, p. 211, 5.
2. Newstead I. Curle, *op. cit.* p. 209, 6.
3. Pompeii. By MOMMO (?). Atkinson, *Pompeii*, No. 61.
4. Margidunum. *Ad nat.*
5. Pompeii. Atkinson, *op. cit.* No. 37.
6. „ „ „ No. 38.
7. „ By the potter of the large rosette. Atkinson, *op. cit.* No. 42.
8. Margidunum. *Ad nat.*

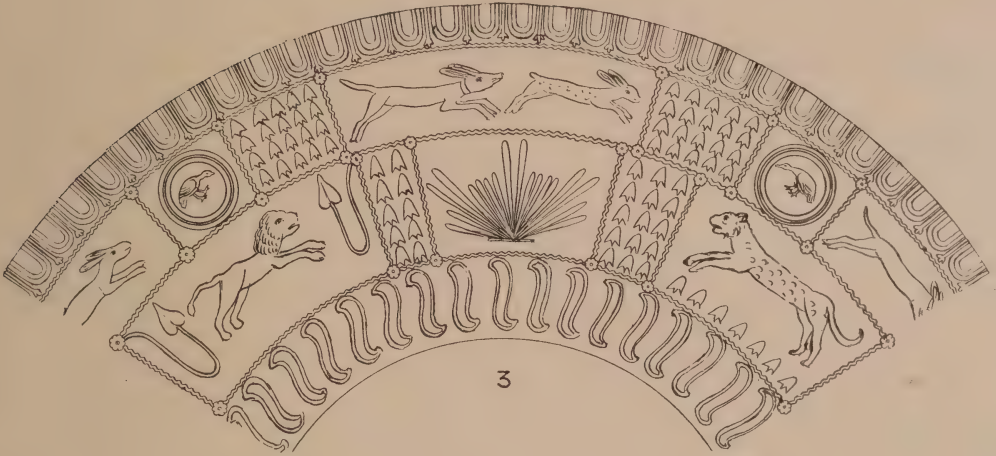
Scale  $\frac{1}{2}$ .



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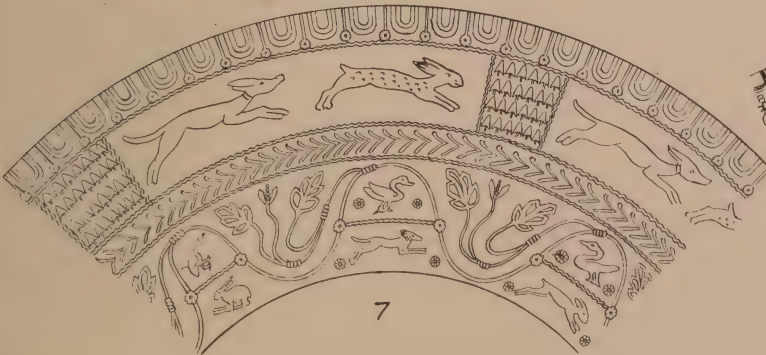
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PLATE XV.

DRAGENDORFF FORM 37, DECORATIVE DETAILS.

1. Pompeii. By the "potter of the large rosette." Atkinson, *Pompeii*, No. 50.
2. Margidunum. *Ad nat.*
3. Pompeii. By MOMMO (?). Atkinson, *op. cit.* No. 57.
4. " " (?) " " No. 71.
5. " " (?) " " No. 55.
6. " Stamped MEMORIS. " " No. 73.

Scale  $\frac{1}{2}$ .



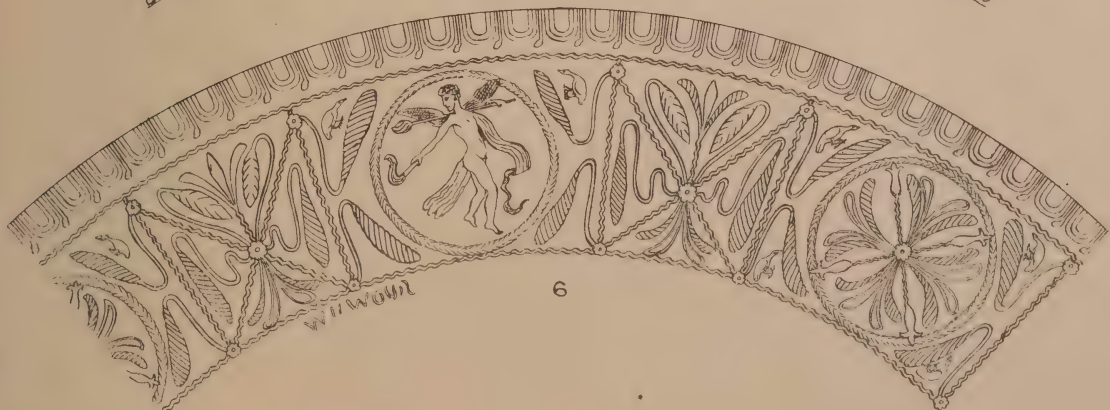


PLATE XVI.

DRAGENDORFF FORM 37, DECORATIVE DETAILS.

*Bregenz Cellar find*, Jacobs, J., *Sigillatafunde aus einem röm. Keller zu Bregenz*, Jahrbuch f. Altertumskunde, Pl. VI. 1912.

- |           |    |          |            |
|-----------|----|----------|------------|
| 1. Jacobs | 9. | CORNVTVS | type.      |
| 2.        | „  | 15.      | MERCATOR „ |
| 3.        | „  | 23.      | COSIVS „   |
| 4.        | „  | 30.      | COSIVS „   |

Scale  $\frac{1}{2}$ .



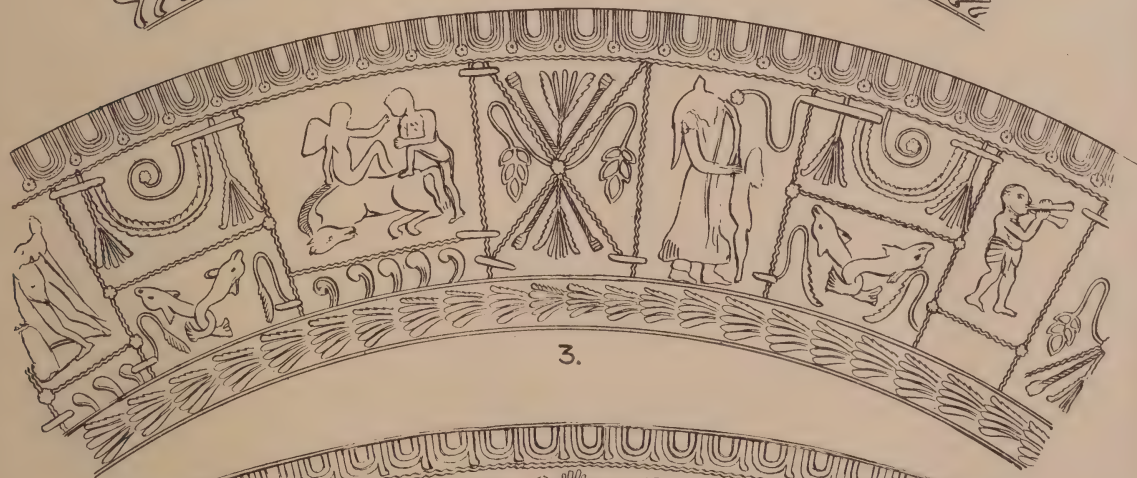




PLATE XVII.

DRAGENDORFF FORM 37, DECORATIVE DETAILS.

1. Rottweil. By RANTO (?). Knorr, *Rottweil*, 1907, Pl. IX. 1.
2. La Madeleine. In the style of ALBILLYS. Fölzer, *Ostgall. Sigillata*, Pl. I. 23.
3. Vechten. In style of SATTO. Fölzer, *op. cit.* Pl. III. 24.
4. Mainspitze. Stamped SATTO FECIT. Fölzer, *op. cit.* Pl. V. 3.
5. Lavoye. By TRIBUNVS. Fölzer, *op. cit.* Pl. VIII. 1.
6. Lavoye. (From a mould.) Fölzer, *op. cit.* Pl. VII. 1.
7. Osterburken. Stamped AVITI F. Fölzer, *op. cit.* Pl. VI. 12.
8. Arentsburg. By first group of Trèves potters. Fölzer, *op. cit.* Pl. XII. 17.
9. Trèves.                   "       "       "       "       "       "       Pl. XII. 11.

Scale  $\frac{1}{2}$ .



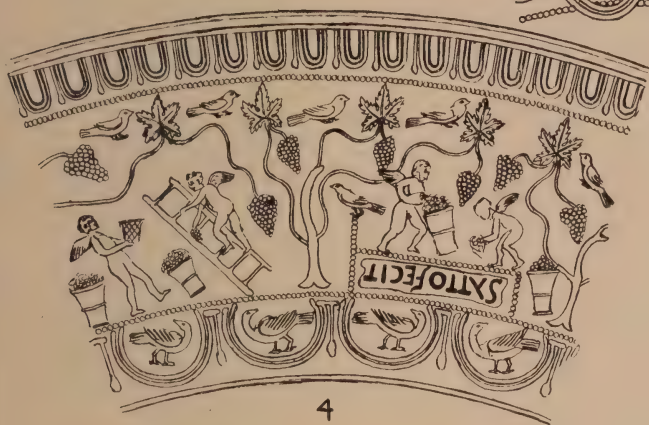
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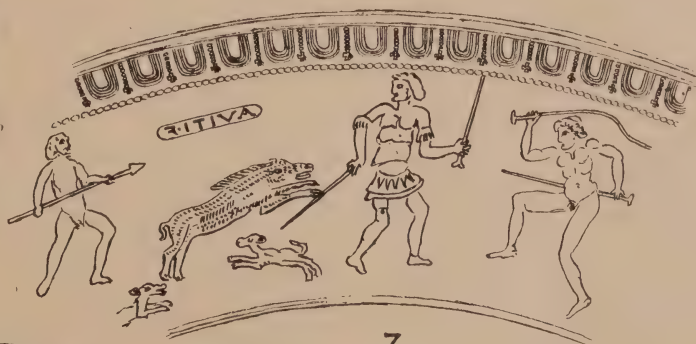
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## PLATE XVIII.

DRAGENDORFF FORM 29/37, AND DECORATIVE DETAILS OF FORM 37.

1. Form 29/37. Trèves. By first group of Trèves potters. Fölzer, Pl. XIII. 1 (restored).
2. Vechten. Stamped CENSOR. Fölzer, Pl. XV. 1.
3. Trèves. Stamped DEXTRI. Fölzer, Pl. XV. 14.
4. Bonn. Stamped TORDILO. Fölzer, Pl. XIX. 2.
5. Dalheim. Stamped ALPINI FORM. Oelmann, *Niederbieber*, Abb. 6.
6. Heddernheim. In style of ALPINIVS. Fölzer, Pl. XX. 7.
7. Trèves. Stamped CRICIRO. Fölzer, Pl. IX. 6.
8. Trèves. By third group of Trèves potters. Fölzer, Pl. IX. 1.
9. Neumagen. Last period of Trèves potters. Fölzer, Pl. XXIV. 16.

Scale  $\frac{1}{3}$  for Fig. 1 ;  $\frac{1}{2}$  for Figs. 2-9.

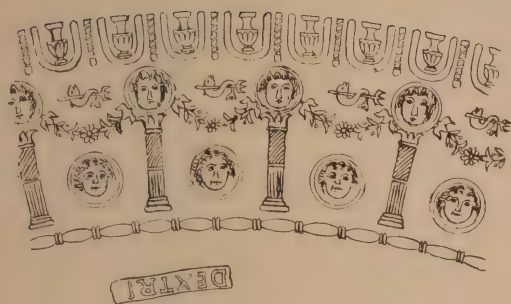




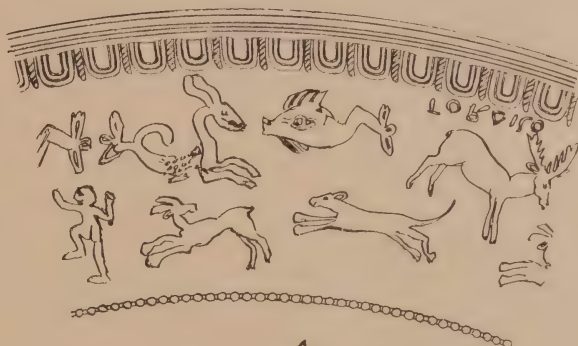
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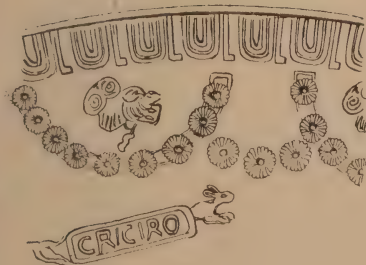
4



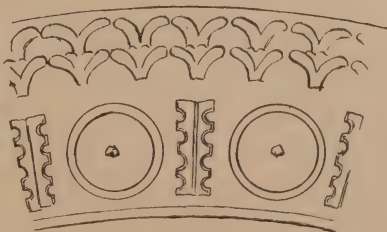
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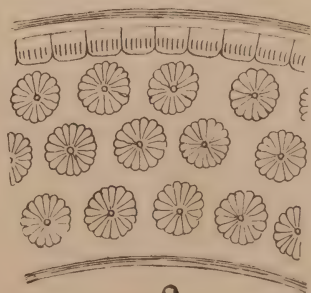
6



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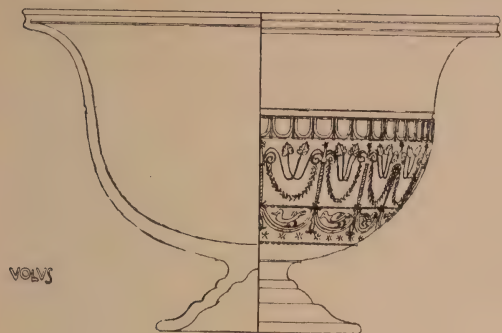
9

PLATE XIX.

DRAGENDORFF FORMS 11, 29 AND 37; -AND DECORATIVE  
DETAILS OF FORM 37.

1. Form 11. Roanne, cemetery dating from Augustus. Stamped VOLVS. Déchelette I. Pl. I.
2. Form 29. Silchester. From a photograph by Mr. George Clinch.
3. Form 37. Banassac. Déchelette, I. Fig. 79.
4. " Pompeii. Inscribed BIBE AMICE DE MEO. Banassac ware. Déchelette, I. Fig. 80.
5. " Rottweil. Stamped BIRACIL. Knorr, *Rottweil*, 1907, Pl. XV. 5.
6. " Rottweil. Stamped L COSI. " " " Pl. XIV. 1.
7. " Rottweil. Stamped CRVCVRO. " " " Pl. XI. 1.

Scale  $\frac{1}{3}$  for Figs. 1-4,  $\frac{1}{2}$  for Figs. 5-7.

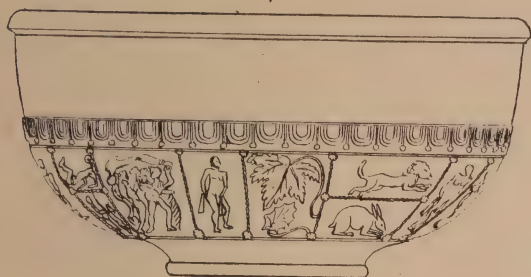


VOLVS

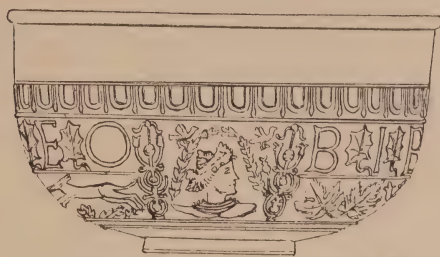
1



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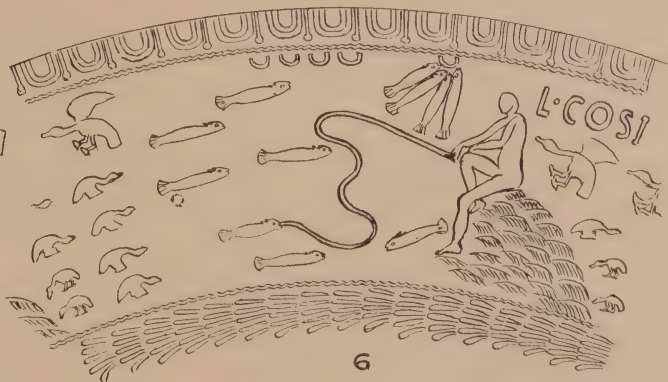
3



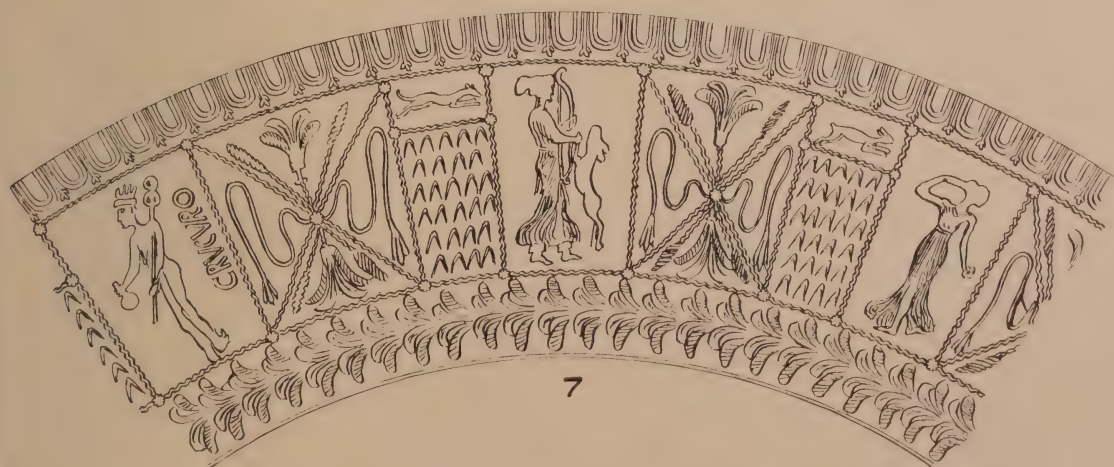
4



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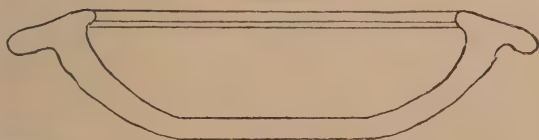
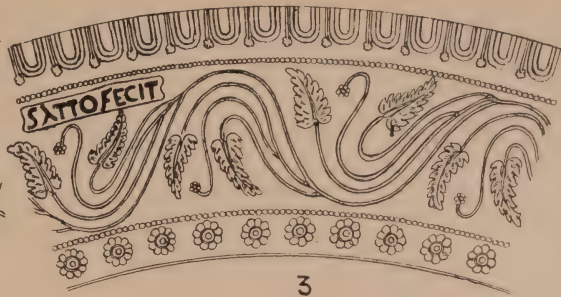


## PLATE XX.

### DRAGENDORFF FORMS 37 AND 30, DECORATIVE DETAILS; AND DECHELETTE FORM 71.

1. Form 37. Silchester. Stamped MERCATO. May, *Silchester*, Pl. XXV. 5.
2. „ Clermont Ferrand. Stamped GERMANI. Déchelette II. No. 556.
3. „ Rheinzabern. Stamped SATTO FECIT. Fölzer, Pl. III. 11.
4. „ Aquileia. Stamped BVTRIO. Knorr, *Rottweil*, 1912, Pl. XXX. 4.
5. Form 30. Lezoux. Déchelette I. Fig. 133.
6. Form 71. Lezoux. Stamped OFFI LIBERTI (from mould). Déchelette I. Fig. 136.
- 6A. „ Lezoux. Déchelette I. Pl. V.
7. Form 37. Lezoux. Style of CINNAMVS. Déchelette I. Pl. X. 3.

Scale  $\frac{1}{8}$ .



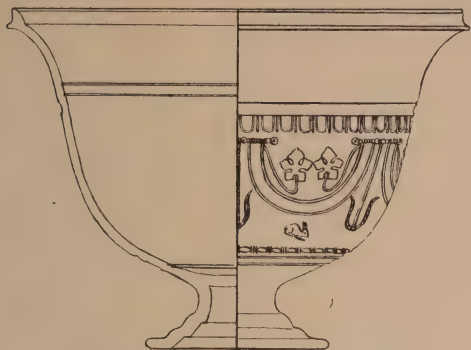
# PLATE XXI.

DRAGENDORFF FORM 11; DÉCHELETTE FORMS 64, 65, 66, 67, 68;  
KNORR FORM 78.

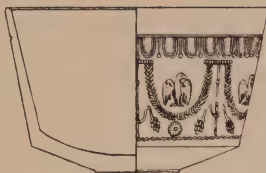
1. Form 11. Hofheim I. Ritterling, *Hofheim*, Pl. XXXII. 16.
2. Form 78. Hofheim II. Ritterling, *Hofheim*, Pl. XXXII. 20.
3. „ Rottweil. Style of GERMANVS. Knorr, *Rottweil*, 1907, Pl. XVI. 5.
4. Form 64. Lezoux. Style of LIBERTVS. Déchelette I. Pl. IV.
5. „ Oundle. Stamped OF LIBERTI. C. R. Smith, *Collectanea Antiqua*, iv. 63 (restored).
6. „ Colchester. Style of LIBERTVS. Walters, *C.R.P.* Pl. XXVI. M 1597.
7. Form 65. Vichy. OF LIBERT. Déchelette I. Pl. IV.
8. Form 67. Aislingen. Knorr, *Aislingen*, Pl. X. 1.
9. „ Lezoux (?). Déchelette I. Pl. IV.
10. „ Hofheim II. Ritterling, *Hofheim*, Pl. XXXII. 21.
11. „ Newstead I. Curle, *Newstead*, Pl. XXXIX. 7.
12. „ „ „ „ Pl. XXXIX. 8.
13. „ Rottweil. Knorr, *Rottweil*, 1912, Pl. XVII. 16 (restored).
14. Form 66. Sèvres. Style of LIBERTVS. Déchelette I. Pl. IV.
15. Form 68. Lezoux. Déchelette I. Pl. IV.

Scale  $\frac{1}{3}$ .

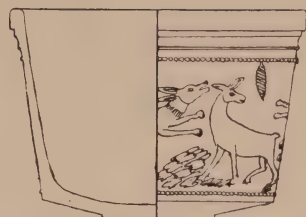




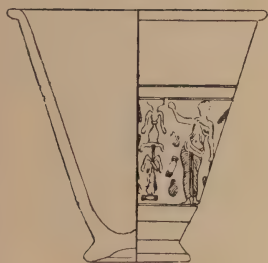
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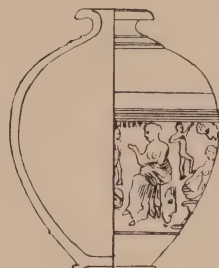
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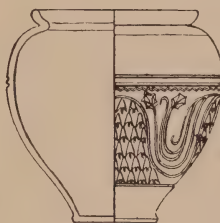
7



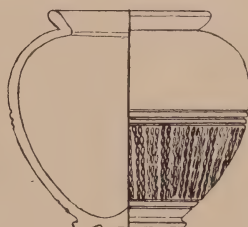
8



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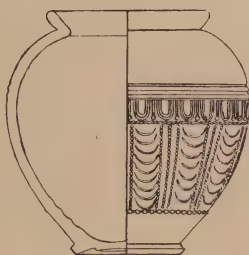
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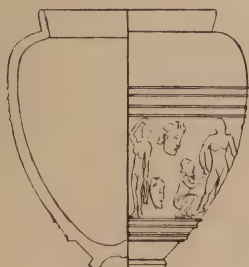
11



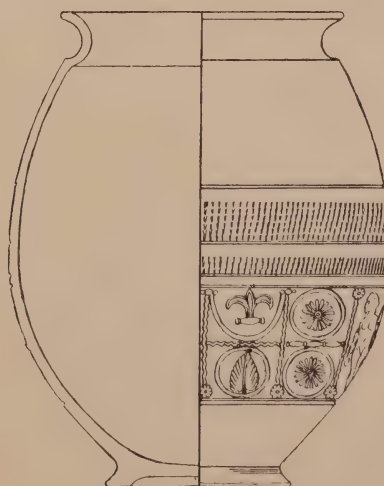
12



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PLATE XXII.

SILVER VESSELS OF THE AUGUSTAN PERIOD.

1. Scyphos. Bosco Reale. A. M. A. Héron de Ville Fosse, *La Trésor Bosco Reale, Monuments Piot*, V.
2. Scyphos. Osztropataka, Hungary. Drexel, *Alexandrinische Silbergefässe*, Pl. VII. 3, *Bonn. Jahrb.* cxviii. p. 232.
3. Goblet. Berthouville near Bernay (Eure). After Libonis.
4. Casserole (handle omitted). Bosco Reale. A. M. A. Héron de Ville Fosse, *op. cit.* Pl. XXIV. 1.
5. Ivy beaker (handles omitted). Hildesheim. Winter and Pernice, *Der Hildesheimer Silberfund*, 1902, Pl. XVIII.
6. Tripod bowl. Hildesheim. Winter and Pernice, *Der Hildesheimer Silberfund*, 1902, Pl. XX.
7. Scyphos. Bosco Reale. A. M. A. Héron de Ville Fosse, *op. cit.* Pl. XV. 2.
8. Sitting hare from similar scyphos. Bosco Reale. A. M. A. Héron de Ville Fosse, *op. cit.* Pl. XVI. 1.
9. Cantharos from Alesia. A. M. A. Héron de Ville Fosse, *Monuments Piot*, ix. Pl. XVI. 1902.
10. Cotylos (with lid). Arras (Vienna Museum). E. Michon, *Mém. Soc. Nat. des Antiq. de France*, lxx. 1911, p. 135.
11. Cantharos. Bosco Reale. A. M. A. Héron de Ville Fosse, *Monuments Piot*, v. Pl. XIV. 2.

Scale  $\frac{1}{3}$ .



1



2



3



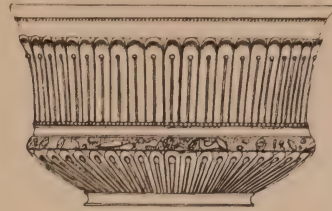
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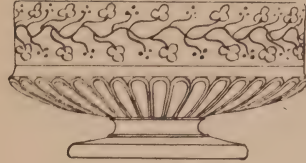
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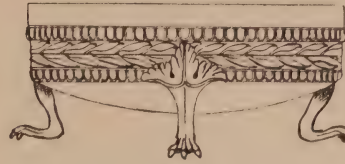
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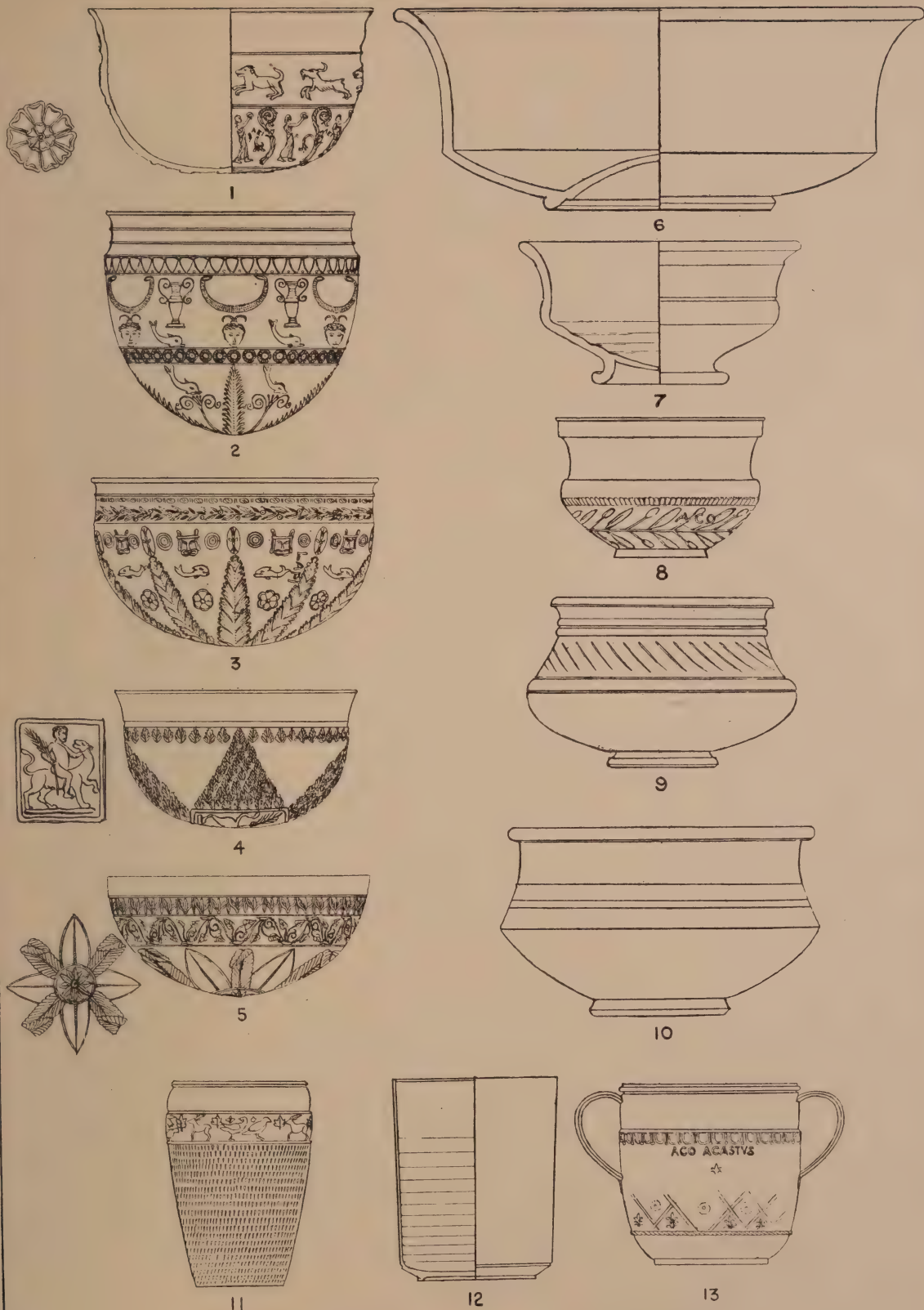


## PLATE XXIII.

### PERGAMENE, MEGARIAN, ITALIAN AND NATIVE CERAMICS.

1. " Megarian " bowl. Pergamum (Berlin). Conzé, *Kleinfunde aus Pergamon*, Pl. V.  
(restored).
2. " " Samos. M. Collignon, *Tiare en Or, Monuments Piot*, vi.  
1899, p. 56.
3. " " Italy (British Museum). By L. APPIVS. *Ad nat.*
4. " " Athens (Mainz). F. Behn, *Röm. Keramik*, i. 10, No. 145.
5. Arretine bowl. Arretium (Bethnal Green Mus.). *Ad nat.*
6. Belgic bowl. Hofheim I. Ritterling, *Hofheim*, Type 109 A.
7. " " " " " " " 47.
8. Native ware. Garlasco (Turin Mus.). Handles omitted. Déchelette I. Fig. 23.
9. " " Mont Beuvray. Bulliot, *Album*, Pl. XVIII. (1).
10. " " " " " " Pl. XXXI. 18.
11. Aco beaker. " " Déchelette I. Fig. 12 (restored).
12. Terra Sigillata. Haltern. Loeschcke, *Haltern*, x. Type 16.
13. Aco beaker. Persona, Lake Maggiore. Déchelette I. Fig. 21.

Scale  $\frac{1}{8}$ .



# PLATE XXIV.

## ITALIAN SIGILLATA; AND EGYPTIAN LOTUS BOWL.

- |                   |   |  |
|-------------------|---|--|
| Arretine<br>ware. | { | 1. Arezzo. Stamped P. CORNELI and ANTIOCVS. Fabroni, <i>Storia degli antichi vasi fittili Aretini</i> , Pl. VIII.                                |
|                   |   | 2. Arezzo. Stamped PANTAGATVS. Loeb Collection, Pl. VIII. 306.   |
|                   |   | 3. Arezzo. Upper border of bowl by M. PERENNIVS and TIGRANVS. Loeb Collection, Pl. II.   |
|                   |   | 4. Arezzo. Stamped SATVRNI. Knorr, <i>Aislingen</i> , Pl. I. 14.   |
|                   |   | 5. Arezzo. Loeb Collection, Pl. XXIII. 395.  |
|                   |   | 6. Arezzo. Loeb Collection, Pl. VI.  |
|                   |   | 7. Arezzo. Fabroni, <i>op. cit.</i> Pl. VI. 3.   |
| Puteolan<br>ware. | { | 8. Puteoli. By NÆVIVS. Dragendorff, <i>Bonn. Jahrb.</i> 96, Pl. VI. 75.  |
|                   |   | 9. " " " " " " " " Pl. VI. 57.   |
|                   |   | 10. " " " " " " " " Pl. VI. 69.  |
|                   |   | 11. Lotus bowl of blue faïence, with dedication to Rameses II. (1300-1230 B.C.). British Museum. Wallis, H., <i>Egyptian Ceramic Art</i> , 1900. |

Scale  $\frac{1}{2}$ , except for Fig. 11, which is  $\frac{1}{3}$ .





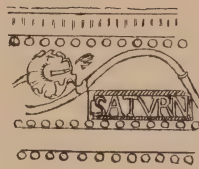
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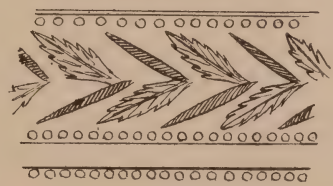
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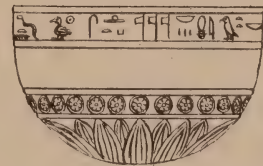
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PLATE XXV.

DRAGENDORFF FORMS 29, 11 AND 30, DECORATIVE DETAILS;  
AND AUGUSTAN SCULPTURE.

1. Form 29. Moulins. Tiberian. Déchelette II. p. 9.
2. „ Vindonissa. Stamped DARIBITVS. Knorr, *Aislingen*, Pl. XVII. 1.
3. „ Strasbourg. Tiberian. Henning, *Strasbourg*, Pl. XXIII. 3.
4. „ Strasbourg. Stamped MELVS FECI. Henning, *op. cit.* Pl. XX. 5.
5. „ Hofheim. Stamped MOD. Ritterling, *Hofheim*, Pl. XXIV. 9.
6. „ Lezoux. Style of ATEPOMARVS. Déchelette I. Fig. 131.
7. Form 11. Arretine ware. Roanne. Déchelette I. Fig. 6.
8. Ara Pacis Augustae, wreath on inner frieze. E. Strong, *Roman Sculpture*, Pl. XX.
9. „ „ „ lower frieze. E. Strong, *op. cit.* Pl. XVIII.
10. Form 30. Margidunum. (*Ad nat.*)
11. Ara Pacis Augustae, frieze.

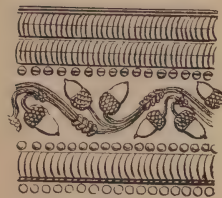
Scale  $\frac{1}{2}$  for all the figures except Figs. 8, 9, 11, which are reduced still further.



1



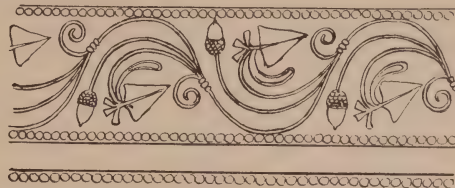
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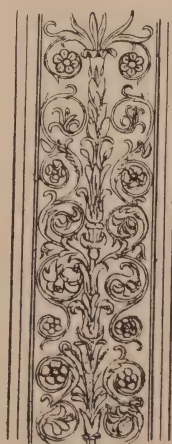
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# PLATE XXVI.

## ITALIAN AND PROVINCIAL SIGILLATA ; ACO BEAKER.

- |                                   |   |   |  |
|-----------------------------------|---|---|--|
| Arretine<br>craters,<br>Type C.   | }   | 1. Haltern. Hähnle, <i>Die Reliefkelche</i> , Pl. VIII. 19.   |  |
|                                   |   | 2. Louvre. Rayet and Collignon, <i>Hist. de la céramique grecque</i> , Pl. XIII.  |  |
| Form 29.                          | }   | 3. Silchester. Stamped VITLVS. <i>Ad nat.</i><br>(a) Xanten. Steiner, <i>Xanten</i> .<br>(b) Silchester. (c) Xanten. (d) Haltern. |  |
| Fragment<br>of crater,<br>Type B. |   | }   | 4. Haltern. Hähnle, <i>op. cit.</i> Abb. 8.  |
|                                   |   |   | 5. Colchester. Stamped VOLVS. <i>Ad nat.</i> |
| Form 29.                          | 6. Pleshey. Stamped ACVTI M. <i>Ad nat.</i> (restored). |   |  |
|                                   | }   | 7. Vindonissa. Stamped GENIALIS F. Knorr, <i>Aislingen</i> , Pl. XVIII. 4.  |  |
| Form 30.                          |   | 8. Aislingen. Style of BASSVS COELVS. Knorr, <i>Aislingen</i> , Pl. X. 6.   |  |
| Mould<br>of crater,<br>Type B.    | }   | 9. Arezzo. Stamped BARGATES. Hähnle, <i>op. cit.</i> Abb. 14, 4.  |  |
|                                   |   | 10. Colchester. Tibério-Claudian (271-97). <i>Ad nat.</i>   |  |
| Form 29.                          |   | 11. Rottweil. Knorr, <i>Rottweil</i> , 1912, Pl. X. 3.  |  |
|                                   | }   | 12. Rottweil. Knorr, <i>Rottweil</i> , 1912, Pl. XI. 2 and 12.  |  |
| Aco bowl.                         |   | 13. Stamped CHRYSIPPVS. Lehner, <i>Bonner Jahrb.</i> 122, p. 21.  |  |
| Form 37.                          | }   | 14. Lezoux. Stamped OF LIBERTI. Déchelette I. Pl. IX. 4.  |  |
|                                   |   | Scale $\frac{1}{3}$ , excepting Figs. 4, 5, 9, 10, 12, which are $\frac{1}{2}$ .  |  |



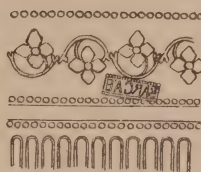
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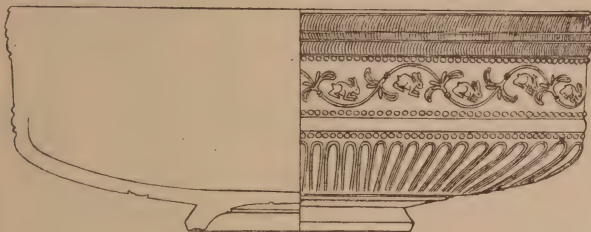
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d



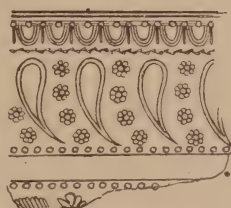
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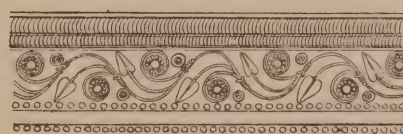
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8



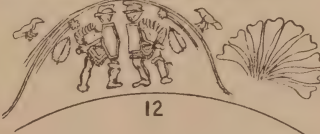
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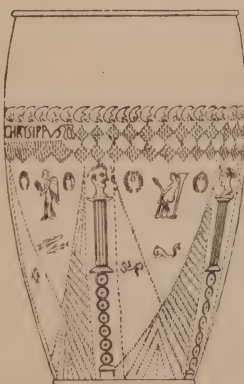
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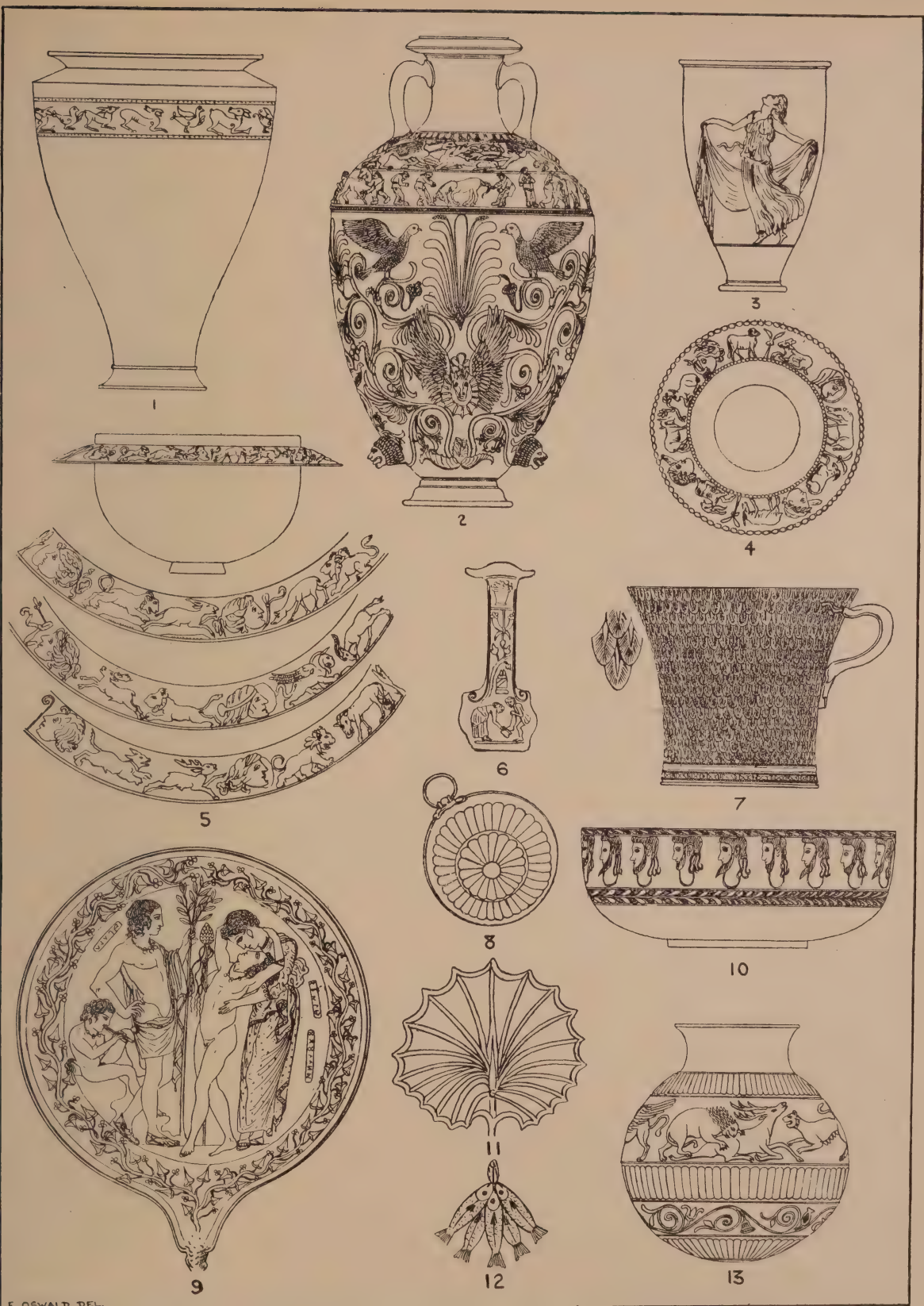
13

## PLATE XXVII.

### METAL VESSELS AND TYPES.

1. Bronze bucket. Este, Padua. *British Museum Guide to Early Iron Age*, Fig. 18.
2. Silver amphora. Chertomlyk (Nikopol). Riegl, *Stilfragen*.
3. Silver beaker. Vicarello (Aqua Apollinares), near Rome. Lièvre, *Works of Art in England*, Pl. XLVII.
4. Silver patera. Vienna Museum. Vassits, *Rev. archéol.* 1903, I. p. 27.
5. Silver vase. Champagne. De Longpérier, *Gaz. archéol.* 1880, Pl. I.
6. Handle of œnochoe. Bologna Museum. Schreiber, *Alexandr. Toreutik*, Fig. 88.
7. Silver cup. Bosco Reale. Héron de Villefosse, *Monum. Piot*, v. Pl. XXIII. 1.
8. Bronze bowl, basal view. Egypt, XVIII. Dynasty. Flinders Petrie, *The Metals in Egypt*, Ancient Egypt, 1915, Pl. I.
9. Etrusco-Greek mirror, bronze. Gerhard, *Etrusk. Spiegel*, Pl. LXXXIII.
10. Silver bowl (handle omitted). Mycenae. Tsundas, *Ephemeris*, 1888, Pl. VII.
11. Gold plate. Mycenae. Schuchardt, *Schliemann's Excavations*, Fig. 192.
12. Fish on a silver-gilt chiselled casserole. Perm Govt., Russia. Schreiber, *Alexandrinische Toreutik*, Fig. 63.
13. Silvergilt bowl. Kul Oba tumulus, Kertch. S. Reinach, *Antiquités du Bosphore Cimmérien*, Pl. XXXIV. 3.





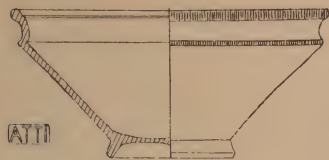
## PLATE XXVIII.

### ARRETINE, MARBLED, MEGARIAN, MINOAN WARE, ETC.

1. Arretine cup; marbled. Mainz. Stamped ATTI. Behn, *Röm. Keramik*, Abb. 10, 1.
2. Arretine. Dragendorff Form 10.
3. Form 29, upper frieze. Silchester. From a photograph by Mr. George Clinch.
4. Form 30. Leicester Museum. *Ad nat.*
5. Arretine cantharos. Castellani, Apulia. Walters, *C.R.P.* Pl. VII. 1, L 57.
6. Ritterling Type 25 aa. Hofheim. Ritterling, *Hofheim*, Taf. XXXII. 25 aa.
7. Megarian bowl. Olbia, South Russia. Zahn, *Arch. Jahrb.* xxiii. 1908, p. 45.
8. Polychrome relief-bowl. Minoan period, Knossos. D. MacKenzie, Pottery of Knossos, *Journ. Hellenic Studies*, xxiii. 1903, Pl. VI. 3.
9. Form 30; marbled. Mannheim. Stamped CALVS F. Behn, *Röm. Keramik*, Abb. 14.
10. Form 29. Leicester Museum. *Ad nat.*
11. Form 29; marbled. Pompeii. H. Roux and M. L. Barré, *Herculanum et Pompéi*, tome vii. Pl. 65.
12. Form 29. Heddernheim. Stamped KANTOF. Dragendorff, *Heddernh. Mitt.* iv Cp. Pl. XVII. 1 for details.
13. Arretine bowl. Pompeii. Roux and Barré, *op. cit.* Pl. 65.
14. Déch. Form 70. Déch. I. Pl. V.
15. Late Form 37. Bath. A. J. Taylor, *Vict. County Hist. Somersetshire*.
16. Form 29. Jort (Calvados). Tiberian. De Caumont, *Abécédaire d'archéologie (ère gallo-romaine)*, pp. 404, 405.
17. Arretine crater (Form 11). London. C. R. Smith, *Journ. Brit. Archaeol. Assoc.* iv. p. 16.

Scale: all  $\frac{1}{3}$  nat. size, except 3, 4, 13 A, and 17,  $\frac{1}{2}$  nat. size.



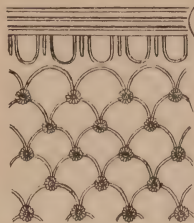


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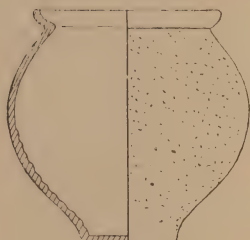
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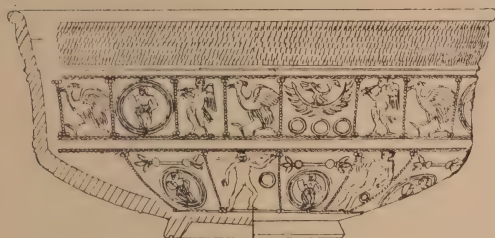
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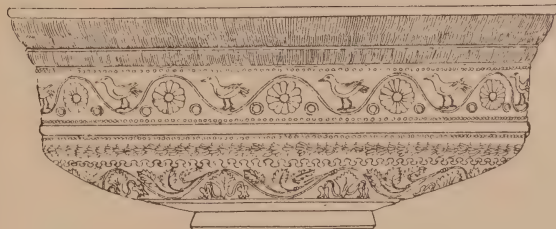
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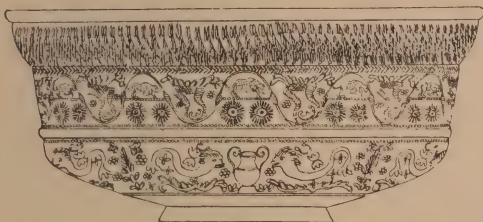
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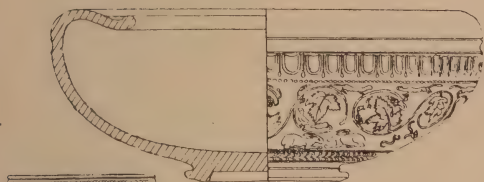
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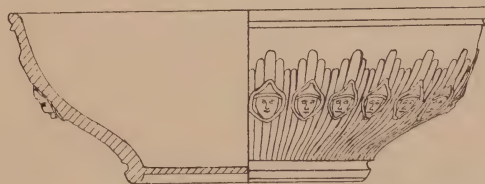
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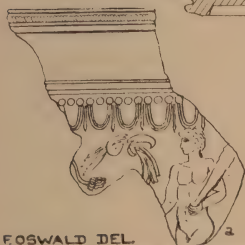
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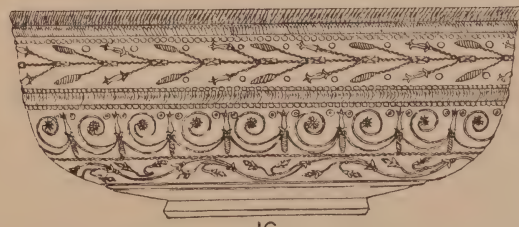
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b



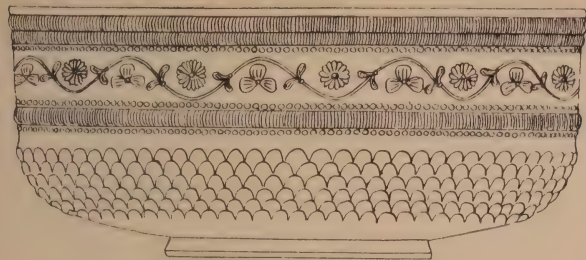
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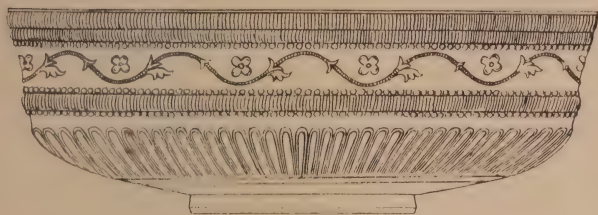
## PLATE XXIX.

1. Form 29. Tiberian. Orleans. Jollois, *Ancien cimetière d'Orléans*, Pl. VIII. 1.
2. Mask ovolo, Form 37. Chester (Foregate Street). (*Ad nat.*)
3. Mask ovolo of RANTO. 37 mould. Luxeuil. Fölzer, Pl. I. 1.
4. Ovolo. Chester. (*Ad nat.*)
5. Form 29. Tiberian. Escles (Vosges Dep.). Jollois, *op. cit.* Pl. XVI. 2.
6. Form 29. Stamped ALBINVS F. Orleans. Jollois, *op. cit.* Pl. VIII. 3.
7. Form 11. Tiberian. Neuss. Curle, *Terra Sigillata*, Fig. 10.
8. Form 29. Claudian. Margidunum. (*Ad nat.*)
9. Form 37. Lezoux, Plicque Collection. Curle, *op. cit.* Fig. 20.
10. Form 37. Stamped IVLIVS F retro. Zugmantel. Curle, *op. cit.* Fig. 39.
11. Form 30. Luxeuil ware. London (Lombard Street). *Archaeologia*, vol. viii. (1787), Pl. XI.
12. Megarian bowl. Athens. Museum of Fine Arts, Boston, No. 533. E. Robinson, *Catalogue of Greek, Etruscan and Roman Vases*, 1893.

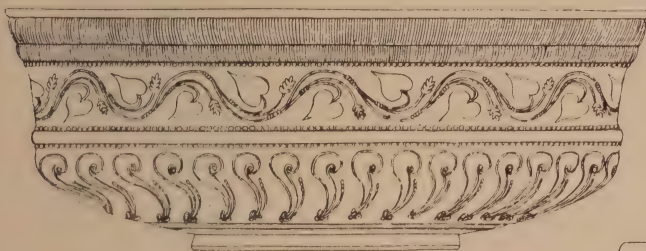
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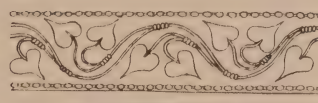
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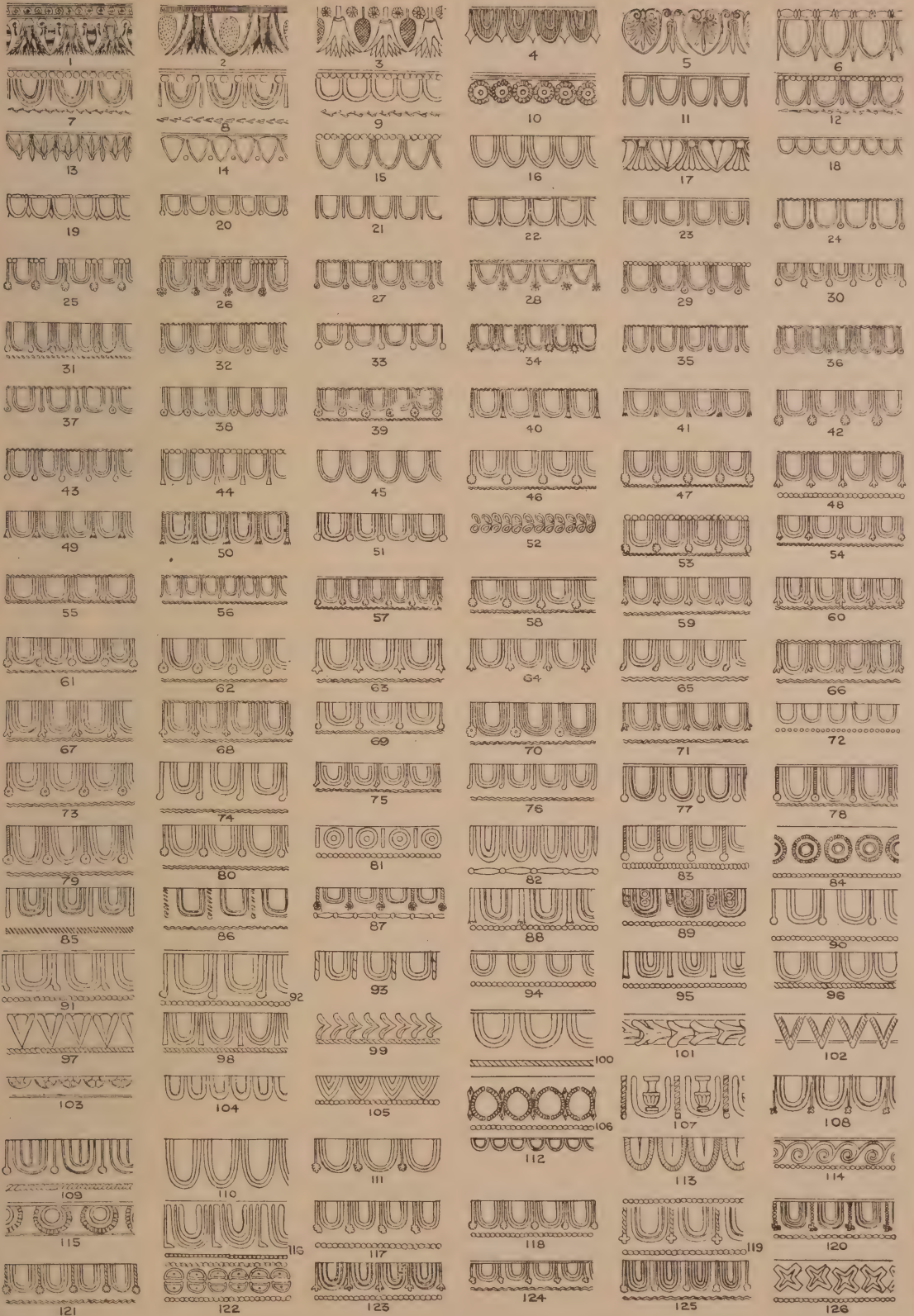
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12

1. Egyptian. After Prisse d'Avesnes (from Petrie, *Egyptian Decorative Art*, p. 121).
2. Egyptian. Mural fresco. Uhde, *Architektur formen d. Klass. Altertums*.
3. Egyptian. Glazed tiles, XX. Dynasty. Petrie, *Arts and Crafts of Ancient Egypt*, fig. 117.
4. Apulian Greek vase, "the Persian Vase," Naples. Furtwängler and Reichhold, *Griech. Vasenmalerei*.
5. Greek vase. Charvet, *Enseignement des arts décoratifs*.
6. From the Erechtheum. *Ibid*.
7. Arretine. M. PERENNIVS. Knorr, *Aislingen*, I. 9.
8. " BARGATES. Knorr, *Aislingen*, II. 13.
9. " M. PERENNI NICEPHOR. Loeb Coll. (Our II. 8.)
10. " M. PERENNI CERDO. Loeb Coll.
11. " CRESTI ATEI EVHODI. Crater, Haltern. (Our II. 1.)
12. " CN. ATEI XANTHI. Crater, Foxton. (Our II. 2.)
13. " Bethnal Green Museum. (Our XXIII. 5.)
14. Samos. Collignon, Monum. Piot VI. 1899, p. 56. (Our XXIII. 2.)
15. Arretine. M. IERENNI CERDO. Loeb Coll. III. 53.
16. Puteolan. Berlin. Dragendorff, *Bonn. Jahrb.* 96, VI. 57. (Our XXIV. 9.)
17. Roman altar. Mus. d. Therme. Strong, *Roman Sculpture*.
18. Roman bowl (silver). Hildesheim. Winter and Pernice, *Der Hildesheimer Silberfunde*, XX. (Our XXII. 6.)
19. Roman cotyls (silver). Arras (Vienna). Michon, *Mém. Soc. Antiq. France*, lxx, 1911, p. 135. (Our XXII. 10.)
20. Aco beaker. Persona, L. Maggiore. Déchelette I. 21. (Our XXIII. 13.)
21. South Gaul. Crater. Hofheim I. Ritterling, *Hofheim*, XXXII. (Our XXI. 1.)
22. South Gaul. Crater. Roanne. volvs. Déch. I. 1. (Our XIX. 1.)
23. " Form 30. Hofheim I. Ritterling, *op. cit.* XXVII. 23. (Our IX. 1.)
24. South Gaul. Crater. Hofheim I. *Ibid*. Fig. 46, 1. (Our IX. 3.)
25. " Form 30. Hofheim I. *Ibid*. XXXII. 18, and XXVI. 5. (Our VII. 1.)
26. South Gaul. Form 30. Colchester (photo Wright). 1659, 08. (Our X. 5.)
27. South Gaul. Form 30. Hofheim I. Ritterling, *op. cit.* XXVI. 4. (Our VII. 5.)
28. South Gaul. Form 30. Bedfordshire. British Museum. Walters, *C.R.P.*, M 401. (Our VIII. 3.)
29. " " " Strasbourg. Henning, *Strasbourg*, XIX. 7. (Our VII. 6.)
30. " " " Style of BASSVS and COELVS. *Aislingen*. Knorr, *Aislingen*, X. 6.
31. " " " Hofheim I. Ritterling, *op. cit.* XXVII. 20. (Our X. 1.)
32. " " " MASCLVS. Brit. Mus. and Vienna. Knorr, *Aislingen*, Text Fig. 2. (Our VIII. 2.)
33. " " " Asberg. Knorr, *Aislingen*, Text Fig. 3.
34. " " " Brit. Mus. Walters, *C.R.P.* M 444.
35. " " " London (King William St.). *Ad nat.* (Our IX. 4.)
36. " " " Brit. Mus. (Leadenhall St.). Walters, *C.R.P.* M 421. (Our X. 2.)
37. " " " Hofheim I. Ritterling, *op. cit.* XXVII. 5. (Our IX. 2.)
38. " " " Strasbourg. Henning, *op. cit.* XIX. 2. (Our VIII. 1.)
39. " " " Vindonissa. Knorr, *Aislingen*, Text Fig. 4.
40. " " " GERMANI. Rottweil. Knorr, *Rottweil*, 1907, VI. 1. (Our IX. 6.)
41. " " " GERMANI. Rottweil. Knorr, *Rottweil*, 1912, XII. 21-23. (Our X. 4.)
42. " " " Newstead I. Curle, *Newstead*, p. 205, 10. (Our IX. 10.)
43. " " " Newstead I. Curle, *Newstead*, XXXIX. 9. (Our VII. 2.)
44. " " " Hofheim II. Ritterling, *op. cit.* XXVI. 3. (Our VII. 7.)
45. " " " Hofheim II. Ritterling, *op. cit.* XXVII. 1.
46. " " " PAVLLI. Rottweil. Knorr, *Rottweil*, 1907, XIV. 7. (Our IX. 9.)
47. " " " Rottweil. Knorr, *Rottweil*, 1912, XVI. 1. (Our VIII. 4.)
48. " " " Strasbourg. Henning, *op. cit.* XIX. 4. (Our VIII. 6.)
49. " " " Form 37. GERMANI. Rottweil. Knorr, *Rottweil*, 1907, VIII. 1. (Our XI. 7.)
50. " " " GERMANI F. WELS. Knorr, *Rottweil*, 1907, VIII. 7.
51. " " " Style of GERMANVS. Rottweil. Knorr, *Rottweil*, 1912, XIII. 13.
52. " " " Style of GERMANVS. Rottweil. Knorr, *Rottweil*, 1912, XIV. 1.
53. " " " Rottweil. Knorr, *Rottweil*, 1912, II. 7.
54. " " " Margidunum. *Ad nat.* (Our XV. 2.)
55. " " " Rottweil. Knorr, *Rottweil*, 1907, XI. 3.
56. " " " Pompeii. Atkinson, *Pompeii*, 38. (Our XIV. 6.)
57. " " " Hofheim II. Ritterling, *op. cit.* XXXII. 19. (Our XI. 1.)
58. " " " Pompeii. Déch. I. Fig. 64. (Our XI. 6.)
59. " " " Newstead I. Curle, *Newstead*, XL. 13. (Our XI. 2.)
60. " " " Newstead I. Curle, *Newstead*, p. 211, 5. (Our XIV. 1.)
61. " " " Margidunum. *Ad nat.* (Our XV. 2.)
62. " " " Pompeii. Atkinson, *op. cit.* 50. (Our XV. 1.)
63. " " " Style of MOMMO. Pompeii. *Ibid*. 55. (Our XV. 5.)
64. " " " MOMMO. Pompeii. *Ibid*. 54.
65. " " " MEMORIS. Pompeii. *Ibid*. 73. (Our XV. 6.)
66. South Gaul. Form 37. BIRACIL. Rottweil. Knorr, *Rottweil*, 1907, XV. 7. (Our XIX. 5.)
67. " " " CRVCVRO. Rottweil. Knorr, *Rottweil*, 1907, XI. 1. (Our XIX. 7.)
68. " " " MERCATO. Silchester. May, *Silchester*, XXV. 5. (Our XX. 1.)
69. " " " L. COSI. Rottweil. Knorr, *Rottweil*, 1907, XIV. 1. (Our XIX. 6.)
70. " " " COSIVS type, Bregenz cellar. Jacobs, *Bregenz cellar find*, 23. (Our XVI. 3.)
71. " " " MERCATOR type, Bregenz cellar. Jacobs, *Bregenz cellar find*, 23. (Our XVI. 2.)
72. " " " Pompeii. Atkinson, *op. cit.* 72.
73. " " " " " " " 70.
74. " " " " " " " 79.
75. " " " " " " " 68.
76. " " " " " " " 75.
77. " " " Form 78. Hofheim II. Ritterling, *op. cit.* XXXII. (Our XXI. 2.)
78. " " " Form 67. Rottweil. Knorr, *Rottweil*, 1912, XVII. 16. (Our XXI. 13.)
79. Lezoux. Form 37. IVTRIO. Aquileia. Knorr, *Rottweil*, 1912, XXX. 4. (Our XX. 4.)
80. " " " BVTRIO. Auvergne. (Brit. Mus. M 62.) Walters, *C.R.P.* XI. 2. (Our XII. 2.)
81. " " " LIBERTVS. Déch. I. IX. 4.
82. " " " Form 30. COBNERTVS F. Regensburg. Waldersdorff, *Verh. hist. Ver. f. Oberpfalz*, 1898, p. 115. (Our X. 6.)
83. " " " DIVIX F. Brit. Mus. *Ad nat.* (Our VIII. 7.)
84. " " " Form 37. IANVARIS. Wroxeter. Bushe-Fox, *Wroxeter*, 1913, XIII. 15.
85. " " " COBNERTVS. Corbridge. Corbridge Report, 1911, Fig. 13, 1.
86. " " " IVSTI. Corbridge. Corbridge Report, 1911, Fig. 13, 2.
87. " " " Margidunum. *Ad nat.* (Our XIV. 8.)
88. " " " Newstead II. Curle, *Newstead*, p. 225, 3.
89. " " " Newstead II. Curle, *Newstead*, p. 221, 7.
90. " " " PATERNI. Wingham (Brit. Mus. M 1463). Walters, *C.R.P.* XXXI. (Our XII. 1.)
91. " " " CINNAM. Déch. I. xi. 2. (Our XII. 3.)
92. " " " CINNAM. Newstead II. Curle, *op. cit.* XLIV. (Our XII. 4.)
93. " " " CINNAM. Vienna. Knorr, *Rottweil*, 1912, XXX. 8.
94. " " " CENSORINVS. Déch. I. x. 2.
95. " " " Style of ALBIVS. Colchester, Joslin Coll. (Wright, rubbing.)
96. Heiligenberg. Form 37. IANV F. Unterweissach. Knorr, *Cannstatt*, XXVI. 3. (Our XIII. 2.)
97. " " " IANV F. Günzburg. Knorr, *Rottenburg*, Text Fig. 8.
98. " " " IANV F. Rottenburg. Knorr, *Rottenburg*, XI. 1.
99. " " " IANV F. Rottenburg. Knorr, *Rottenburg*, XII. 10.
100. " " " REGINVS F. Köngen. Knorr, *Cannstatt*, XXXVII. and Text Fig. 1. (Our XIII. 6.)
101. " " " REGINVS F. Rottenburg. Knorr, *Rottenburg*, XXVII. 1.
102. " " " REGINVS F. Rottenburg. Knorr, *Rottenburg*, XXVI. 5.
103. " " " REGINVS F. Rottenburg. Knorr, *Rottenburg*, XXVI. 6.
104. East Gaul. Form 30. Silchester. May, *Silchester*, XV. B. (Our X. 9.)
105. Heiligenberg (?). Form 30. Style of CIBIVS. Wroxeter. Bushe-Fox, *Wroxeter*, 1913, XV. 17. (Our X. 8.)
106. Trèves. Form 37. ARENTSBERG. Fölzer, XII. 17. (Our XVII. 8.)
107. " " " DEXTRI. Trèves. Fölzer, XV. 14. (Our XVII. 3.)
108. Heiligenberg. Form 37. Potter of small medallion. Rottweil. Knorr, *Rottweil*, 1907, XVIII. 5.
109. East Gaul. Form 37. Niederbieber. Oelmann, *Niederbieber*, I. (Our XI. 4.)
110. Rheinzabern. Form 37. VALENTIN. Strasbourg. Henning, *op. cit.* XXII. 7. (Our XIII. 7.)
111. Heiligenberg. Form 37. CIRIVNA F. Cannstatt. Knorr, *Cannstatt*, VIII. 1. (Our XIII. 1.)
112. Heiligenberg. Form 29/37. Potter of small medallion. Rottenburg. Knorr, *Rottenburg*, Pl. VIII. 8. (Our XII. 5.)
113. Ittenweiler. Form 37. CIBIVS FEC. Rottweil. Knorr, *Rottweil*, 1907, XXII. 1. (Our XIII. 5.)
114. East Gaul. Form 37. Style of IANVS. Wroxeter. Bushe-Fox, *Wroxeter*, 1912, XIV. 9.
115. East Gaul. Form 37. Newstead II. Curle, *Newstead*, p. 217, 12.
116. Trèves. Form 37. CENSOR. Trèves. Fölzer, X. 4.
117. East Gaul. Form 37. SATTO FECIT. Rheinzabern. Fölzer, III. 11. (Our XX. 3.)
118. Luxeuil. Form 37. Potter of shields and helmet. Rottweil. Knorr, *Rottweil*, 1907, IX. 1. (Our XVII. 1.)
119. La Madeleine. Form 37. ALBILLVS. La Madeleine (mould). Fölzer, I. 23. (Our XVII. 2.)
120. Eschweilerhof. Form 37. AVITI F. Osterburken. Fölzer, VI. 12. (Our XVII. 7.)
121. Luxeuil. Form 37. Brit. Mus. Walters, *C.R.P.* M 1514.
122. Lezoux. Form 37. DOECVVS (40). Wroxeter. Bushe-Fox, *Wroxeter*, 1912, XV. 11.
123. La Madeleine. Form 37. Style of IANVS. Fölzer, Pl. II. 17.
124. Lezoux. Form 37. Déch. I. xii. 1.
125. Lavoye. Form 37. TRIBVNVS. Fölzer, VIII. 1. (Our XVII. 5.)
126. La Madeleine. Form 37. Style of ALBILLVS. Fölzer, II. 29.





# PLATE XXXI.

## SCROLLS.

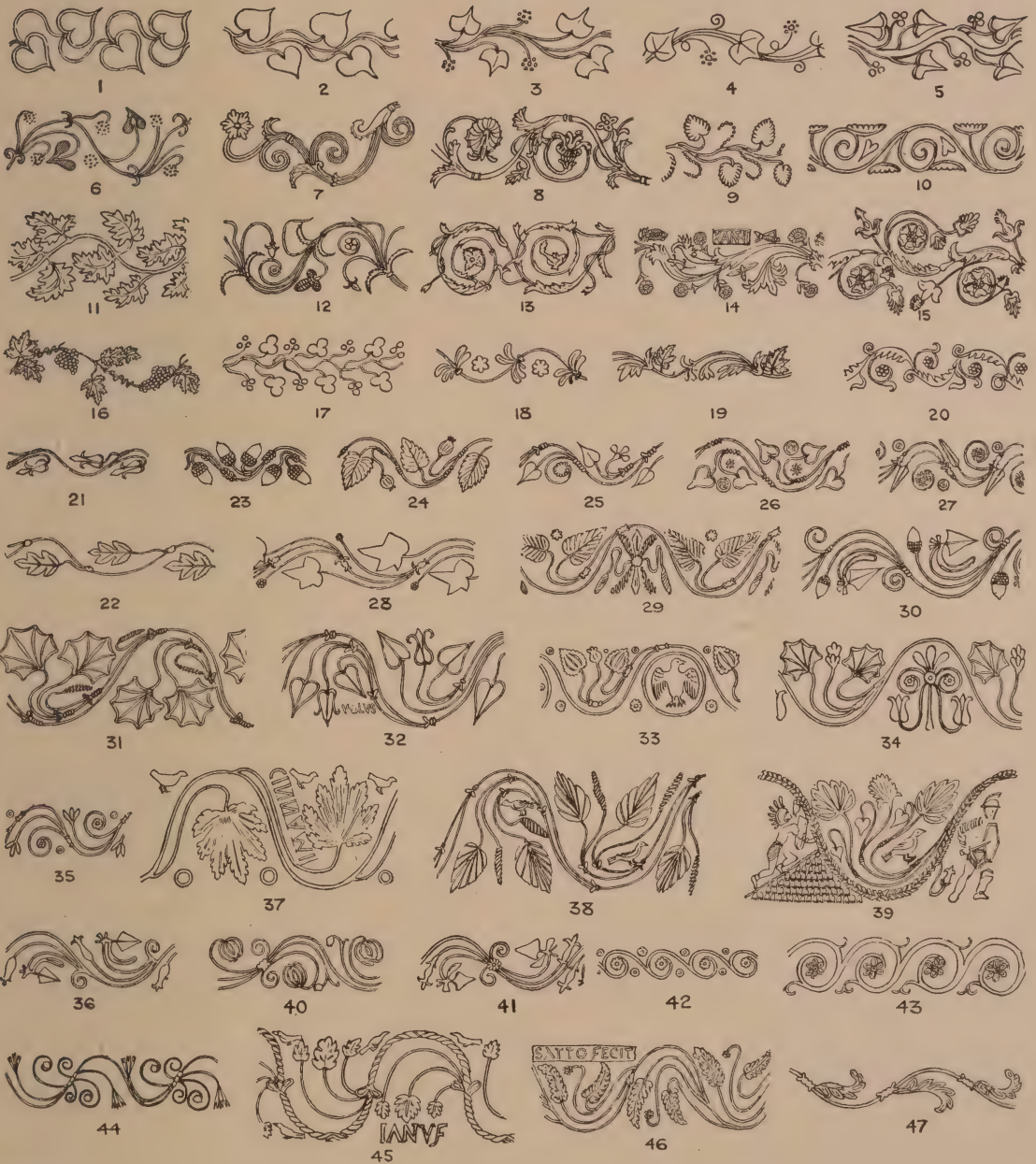
Scale about  $\frac{1}{3}$ .

1. Mycenaean ivy-scroll. Vase from Grave 6, Mycenae. Schuchardt, *Schliemann's Excavations*, Fig. 277.
2. Ivy scroll on Boeotian vase. Riegl, *Stilfragen*, Fig. 82.
3. Ivy scroll round neck of *calpis*. Apulian form, Vulci. Vases in the Fitzwilliam Museum, Pl. XLI.
4. Ivy scroll from crater, Nola, by the late South Italian painter Assteas. Millingen, *Vases grecs*, Pl. 46.
5. Ivy scroll from Greco-Etruscan mirror. Gerhard, *Etruskische Spiegel*, Pl. LXXXIII.
6. Ivy scroll (with wreath-binding). Hadra vase, Alexandria, 264 B.C. R. Pagenstecher, *Dated Sepulchral vases from Alexandria*. Amer. Journ. of Archaeol. ser. 2, xiii. 1909, p. 387, Pl. X. 5.
7. Acanthus scroll. Erechtheum. Riegl, *Stilfragen*, Fig. 113.
8. Acanthus scroll on beaten-gold plate. S. Russia. Hermitage. Riegl, *Stilfragen*, Fig. 129.
9. Serrated-leaf scroll, round base of "Persian" vase (Apulian) at Naples. Fürtwängler and Reichold, *Vasenmalerei*, 1909, Fig. 40.
10. Samnite scroll. Fresco in Samnite tomb, Capua. Bulletino Napolitano, June 1854, p. 178.
11. Vine scroll. Alexander Sarcophagus. P. Gardner, *Sculptured Tombs of Hellas*, Fig. 85.
12. Pompeian scroll, Tomb of the Garlands (in stone). Pompeii. [Wreath binding derived from Acanthus.]
13. Acanthus scroll (in stone). Pompeii. Riegl, *Stilfragen*.
14. Acanthus scroll. *Arretine crater* (Ateius and Xanthus). Mainz.
15. Acanthus scroll with rosettes. *Arretine vase*, Arezzo. Walters, *C.R.P.* Fig. 13, L 70.
16. Vine scroll. *Arretine vase* (Perennius and Tigranus). Loeb Collection, II.
17. Ivy scroll, silver bowl. Hildesheim. Winter and Pernice, *Der Hildesheimer Silberfund*, 1902, XVIII.

[All the following figures are from Provincial Sigillata.]

18. Sessile scroll. Form 29, upper frieze, OFIC BILICATI. Mainz.
19. " " (Acanthus scroll.) Form 29, U.F. Tiberian. Moulins. Déchelette, II. p. 9.
20. Acanthus scroll. Form 30. Margidunum. (*Ad nat.*)
21. Simple-stalked scroll. Form 29, U.F. GENIALIS F. Vindonissa. Knorr, *Aislingen*, Pl. XVIII. 4.
22. " " Form 29, U.F. Strasbourg. Henning, *op. cit.* Pl. XX. 1.
23. Compound-stalked scroll (a) Form 29, U.F. Strasbourg. Henning, *op. cit.* Pl. XXIII. 3.
24. " " " (a) Form 29, U.F. MELVS FECI. Strasbourg. Henning, *op. cit.* Pl. XX. 5.
25. " " " (a) Form 29, U.F. LICINVS F. Hofheim I. Ritterling, *Hofheim*, Pl. XXIII. 2.
26. " " " (a) Form 29, U.F. OF ARDACI. Vindonissa. Knorr, *Aislingen*, Pl. XVII. 2.
27. " " " (b) Form 29, U.F. OF AQVITANI. Vindonissa. Knorr, *Aislingen*, Pl. XVII. 4.
28. " " " (b) Form 29, L.F. CATL. Strasbourg. Henning, *op. cit.* Pl. XX. 3.
29. " " " (b) Form 29, L.F. CARILLI. Strasbourg. Knorr, *Aislingen*, Pl. VIII. 3.
30. " " " (b) Form 29, U.F. MOD (Modestus). Hofheim. Ritterling, *Hofheim*, Pl. XXIV. 9.
31. " " " (b) Form 29, L.F. SENICIO FE. Aislingen. Knorr, *Aislingen*, Pl. VI. 2.
32. " " " (b) Form 29, L.F. VOLVS. Colchester. (*Ad nat.*)
33. " " " (b) Form 37 (L.F. of transitional bowl). Pompeii. Atkinson, *Pompeii*, No. 45.
34. " " " (b) Form 29, L.F. PATRICIVS. Pompeii. Atkinson, *op. cit.* No. 34.
35. " " " (b) Form 37. Pompeii. Atkinson, *op. cit.* No. 37.
36. " " " (b) Form 29, U.F. RVFINVS. Pompeii. Atkinson, *op. cit.* No. 36.
37. " " " (b) Form 37, CINNAM. Vienna. Knorr, *Rottweil*, 1912, Pl. XXX. 8.
38. " " " (b) Form 30. Sandy, Bedfordshire. Walters, *C.R.P.* Pl. XXVI. (M 401).
39. " " " Form 30. Rottweil. Knorr, *Rottweil*, 1912, Pl. XVI. 1.
40. Divergent scroll. Form 29, U.F. Hofheim. Ritterling, *Hofheim*, Pl. XXIV. 10.
41. " " Form 29, U.F. OF BASSI COELI. Xanten. Walters, *op. cit.* Fig. 39 (M 4).
42. Spiral scroll. Form 37. Pompeii. Atkinson, *op. cit.* No. 70.
43. " " Form 37, Style of IANVS. Heiligenberg ware. Rottenburg. Knorr, *Rottenburg*, Pl. X. 1.
44. Divergent scroll. Form 29, U.F. SEVERVS (?). Rottweil. Knorr, *Rottweil*, 1912, Pl. II. 1.
45. Cable scroll. Form 37, IANVS F. Heiligenberg ware. Unterweissach. Knorr, *Cannstatt*, Pl. XXVI. 3.
46. Compound stalked scroll. Form 37. SATTO FECIT. Rheinzaabern. Fölzer, Pl. III. 11.
47. Sessile scroll (Acanthus scroll). Claudian Form 29, U.F. (The lower frieze is the nautilus motive.) Walters, *C.R.P.* M 227, Pl. XXXVI. 14.





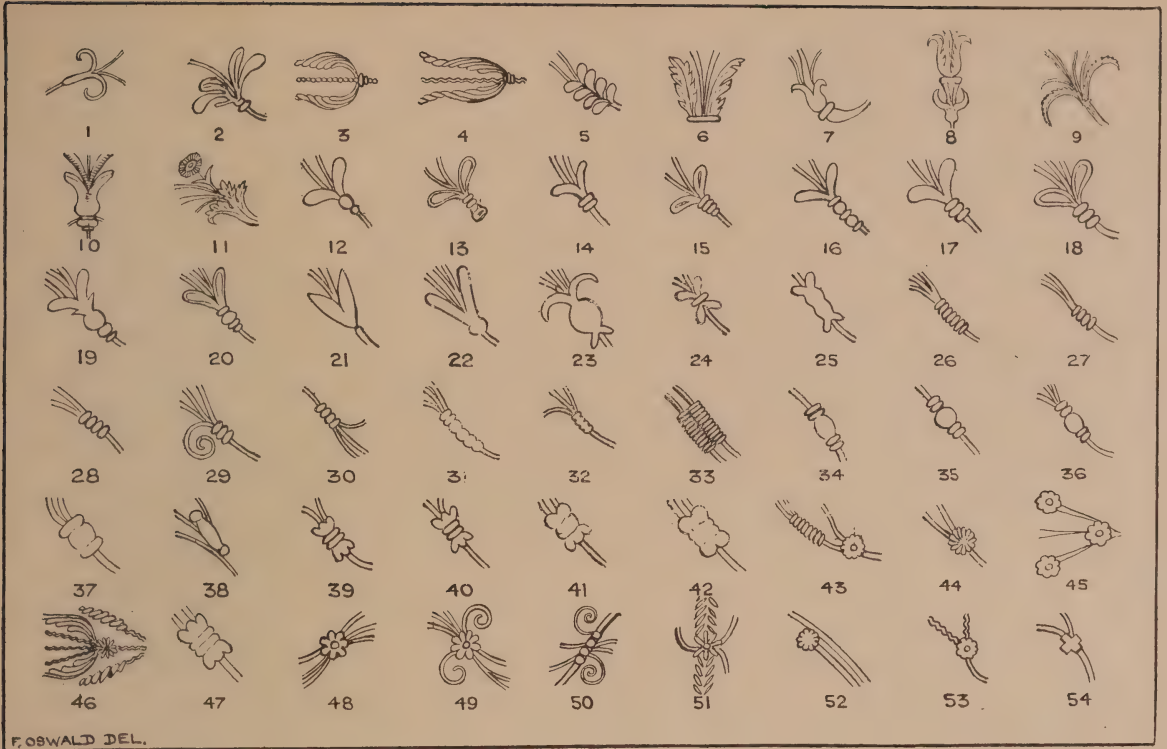


# PLATE XXXII.

## TENDRIL-BINDINGS.

Scale  $\frac{1}{2}$ .

1. Bifid binding. Hadra Vase, 264 B.C., Alexandria. Pagenstecher, *Dated Sepulchral Vases from Alexandria*, Amer. Journ. of Archaeology, ser. 2, xiii. 1909, p. 387.
2. Bead-ring with sessile leaves on Form 29 stamped OFIC BILICATI. Tiberian. Mainz. Behn, *Sammlung Marx*, Pl. VIII. 2.
3. Bead-ring and straight wreath on Form 29, stamped SENICIO F. Tiberian. Mainz. Ritterling, *Hofheim*, Abb. 49.
4. Bead-ring and straight wreath on Form 29. Claudian. Hofheim I. *Ibid.* Pl. XXV. 12 A.
5. Repeated bifid binding on Form 29. Tiberian. Strasbourg. Henning, *Strasbourg*, Pl. XXIII. 3.
6. Annular binding and acanthus leaves. Arretine crater, Roanne Museum. Déch. I. Fig. 6.
7. Annular binding and acanthus leaves. Arretine bowl. Pompeii. Roux and Barré, *Herculanum et Pompéi*, Pl. 65.
8. Annular binding, frieze of Ara Pacis Augustae. E. Strong, *Roman Sculpture*.
9. Bifid binding and bead-ring. Tomb of the Garlands, Pompeii.
10. " " " on Form 29. Style of ATEPOMARVS. Lezoux. Déch. I. Fig. 131.
11. Bifid binding. Arretine crater by ATEIVS. Mainz. Behn, *Röm. Keramik*, Taf. III. 1.
12. Bifid binding and bead-rings on South Gaulish crater. Neuss. Curle, *Terra Sigillata*, Fig. 10.
13. " " " at base of Nautilus motif on Form 29. Tiberian. Strasbourg. Henning, *Strasbourg*, Pl. XX. 1.
14. " " " on Form 29, stamped VOLVS. Claudian. Colchester. (*Ad nat.*)
15. " " " simple stalk, on Form 29, stamped SENICIO FE. Claudian. Aislingen. Knorr, *Aislingen*, Pl. VI. 2.
16. Bifid binding and astragalus, simple stalk, on Form 29, stamped OF ARDACI. Claudian. Aislingen. *Ibid.* Pl. XVIII. 1.
17. Bifid binding and bead-rings, on Form 29, stamped LICINVS F. Claudian. Hofheim I. Ritterling, *Hofheim*, Pl. XXIII. 2.
18. Bifid binding and beads, on Form 29, stamped OF CRESTI. Silchester. May, *Silchester*, Pl. VI. A.
19. " " " on Form 29, stamped OF AQVITANI. Claudian. Vindonissa. Knorr, *Aislingen*, Pl. XVII. 4.
20. " " " on Form 29, stamped OF MODESTI. Claudian. Silchester. May, *Silchester*, Pl. VII. B.
21. Bifid binding and no bead on Form 29 by MOMMO. Pompeii. Atkinson, *Pompeii*, No. 21.
22. Bifid binding and imperfect bead on Form 29, stamped OF MATV. Vindonissa. Knorr, *Aislingen*, Pl. XVIII. 7.
23. Double bifid binding on Form 29, stamped CATLI. Tiberio-Claudian. Strasbourg. Henning, *Strasbourg*, Pl. XX. 3.
24. " " " on Form 29, stamped SENICIO FE. Tiberio-Claudian. Aislingen. Knorr, *Aislingen*, Pl. VIII. 1.
25. " " " on Form 29. Claudian. London. Walters, *C.R.P.* M 227.
26. Moniliform binding on Form 29. Tiberian. Aislingen. Knorr, *Aislingen*, Pl. II. 4.
27. " " " on Form 29, stamped MELVS FECI. Claudian. Strasbourg. Henning, *Strasbourg*, Pl. XX. 5.
28. " " " on Form 29, stamped OF ARDACI. Claudian. Aislingen. Knorr, *Aislingen*, Pl. XVIII. 1.
29. " " " and compound stalk, on Form 29, stamped MOD[ESTVS. Claudian. Hofheim I. Ritterling, *Hofheim*, Pl. XXIV. 9.
30. " " " and compound stalk, on Form 29, stamped VITA . . . Claudian. Strasbourg. Henning, *Strasbourg*, Pl. XXI. 2.
31. " " " on Form 37. Domitian. Newstead I. Curle, *Newstead*, p. 205, 8.
32. " " " on Form 37. Vespasian. Hofheim II. Ritterling, *Hofheim*, Pl. XXXII. 19.
33. " " " on Form 37. Cannstatt. (? Rheinzabern ware.) Knorr, *Cannstatt*, Pl. XXII. 12.
34. Astragalus binding on Form 29, stamped GALLICANI M. Claudian. Aislingen. Knorr, *Aislingen*, Pl. V. 1.
35. " " " on Form 30, stamped MASCLVS F. Claudian. Vienna. *Ibid.* Text Fig. 2.
36. " " " on Form 37. Vespasian. Pompeii. Atkinson, *Pompeii*, No. 38.
37. " " " on Form 29, stamped OF CREST[. Flavian. Carlisle. Bushe-Fox, *Arch.* 64, No. 8.
38. " " " on Form 37, stamped SATTO FECIT. Trajan. Cannstatt. Knorr, *Cannstatt*, Pl. II. 3.



39. Double trifold binding on Form 29, stamped OF PRIMI. Flavian. Vindonissa. Knorr, *Aislingen*, Pl. XVIII. 2.
40. " " on Form 37, stamped MERCA[. Vespasian. Rottweil. Knorr, *Rottweil*, 1907, Pl. XIV. 6.
41. Intermediate between double bifid and trifold binding, on Form 29, stamped CARILLI F. Flavian. Strasbourg. Knorr, *Aislingen*, Pl. VIII. 3.
42. Double bifid binding (or intermediate) on Form 67. Flavian. Aislingen. *Ibid.* Pl. X. 1.
43. Rosette binding on Form 29. Tiberian. Aislingen. *Ibid.* Pl. II. 4.
44. " " on Form 30. Claudian. Hofheim I. Ritterling, *Hofheim*, Pl. XXVI. 2.
45. " " with straight wreath on Form 29, stamped by VITALIS. Flavian. Pompeii. Atkinson, *Pompeii*, No. 30.
46. " " with wreath on Form 29. Claudian. Hofheim I. Ritterling, *Hofheim*, Pl. XXV. 12 B.
47. Double trifold binding on Form 78. Flavian. Cannstatt. Knorr, *Cannstatt*, Pl. XV. 7.
48. Rosette binding and divergent scroll on Form 29. Claudian. Hofheim I. Ritterling, *Hofheim*, Pl. XXIV. 3.
49. " " and divergent scroll on Form 29, stamped OF BASSI COELI. Claudius-Nero. Xanten. Walters, *C.R.P.* M 4.
50. Moniliform binding and divergent scroll on Form 29, stamped by SEVERVS. Flavian. Rottweil. Knorr, *Rottweil*, 1912, Pl. II. 2.
51. Rosette binding with garland on Form 30. Claudian. Hofheim I. Ritterling, *Hofheim*, Pl. XXVII. 18.
52. " " on Form 29. Flavian. Rottweil. Knorr, *Rottweil*, 1912, Pl. XI. 2.
53. " " on Form 29, stamped by VITALIS. Flavian. Pompeii. Atkinson, *Pompeii*, No. 30.
54. Cross binding on late Form 37. Cannstatt. Knorr, *Cannstatt*, Pl. XVII. 2.

# PLATE XXXIII.

## FIGURE TYPES.

Scale : The Sigillata figures are  $\frac{1}{2}$  nat. size ; their prototypes in marble, terracotta or bronze are greatly reduced.

Greek vase.	1.	Satyr with double flute.	On hydria by PAMPHAIOS. Brit. Mus. Walters, <i>Hist. Ancient Pottery</i> , II. Fig. 120.
Neo-Attic reliefs.	2.	" " "	Bacchanalian slab, Vatican. Amelung, <i>Vatikan Katalog</i> , ii. Taf. 74, 421 A.
	3.	" " "	Bacchanalian marble vase by SALPION. Gaeta. <i>Mus. Borbonico</i> , i. 49. (Hauser No. 23.)
	4.	" " "	Bacchanalian crater. Capitol, Rome. Armellini, Pl. 360.
	5.	" " "	Bacchanalian vase by SOSIBIOS. Louvre. Reinach, <i>Reliefs</i> , i. 24.
	6.	" " "	Borghese vase. Gardens of Sallust.
Sigillata.	7.	Eros with double flute on Form 37.	Pompeii. Atkinson, <i>Pompeii</i> , No. 81.
	8.	Siren with double flute on Form 37.	By SATTO. Fölzer, Pl. XXVI. 149.
	9.	Satyr with double flute on Form 37.	Cosius type. Bregenz cellar. Jacobs, <i>Bregenz Cellar Find</i> , 23.
	10.	" " " " Form 37 (mould).	Lezoux. Déch. 314.
	11.	Satyr with double flute on Form 30.	Stamped CALVS F. marbled. Déch. 315; and on Form 37. Rottweil. Knorr, <i>Rottweil</i> , 1912, XXVI. 4, XXVII. 1.
Neo-Attic relief.	12.	" " " " Form 30.	Déch. 316.
Sigillata.	13.	Silenus with double flute.	Bacchanalian marble vase. Pisa (Campo Santo). Dütschke, 132.
	14.	" " " " on mould of Form 37.	Déch. 310; and frequent on vases in style of GERMANVS. Knorr, <i>Rottweil</i> , 1912, Pl. XVI. 4, 9, 10, 11.
Neo-Attic relief.	15.	" " " " on mould of Form 37.	Déch. 312. Lezoux.
Sigillata.	16.	Dionysiac panther.	Bacchanalian marble bas-relief, Civita Vecchia. Brit. Mus. (Townley Coll.) Hauser No. 22.
	17.	" " "	Megarian vase. Behn, <i>Röm. Keramik</i> , Pl. I. 10.
Neo-Attic relief.	18.	" " "	Bacchanalian terracotta bas-relief. <i>Plaque Campana</i> , Pl. 34.
	19.	" " "	Silver patera of Africa. Bosco Reale. Héron de Villefosse, Mon. Piot IV.
Sigillata.	20.	" " "	on Form 37 by GERMANVS. Knorr, <i>Rottweil</i> , 1907, Pl. VIII. 1, and on Form 29, <i>Ibid.</i> Pl. V. 1.
	21.	" " "	on Form 30 by MASCLVS. Vienna. Knorr, <i>Rottweil</i> , 1907, Pl. XIII. 2. Déch. 802.
	22.	" " "	on Form 30. Style of GERMANVS. Knorr, <i>Rottweil</i> , 1907, Pl. VII. 1, and on Form 37 by CINNAMVS (without the panther). Déch. 302.
Neo-Attic reliefs.	23.	Hermaphrodite (or Faun) with thyrsus.	Bacchanalian marble vase. Pisa (Campo Santo). Dütschke, 132. (Hauser No. 18.)
	24.	" " " " with torch.	Bacchanalian terracotta bas-relief. Brit. Mus. (Townley Coll.).
Sigillata.	25.	" " " " with torch on Form 30 by GERMANVS.	Knorr, <i>Rottweil</i> , 1907, Pl. VI. 1, and VII. 1. Déch. 353.
	26.	" " " " with torch on Form 37 by MEMOR.	Pompeii. Atkinson, <i>Pompeii</i> , No. 73.
Neo-Attic relief.	27.	Maenad with knife.	Bacchanalian vase by SOSIBIOS. Louvre. Reinach, <i>Reliefs</i> , I. 24. (Hauser No. 25.)
Sigillata.	28.	" " "	Arretine bowl. Loeb Collection, Pl. IX. 2.
Neo-Attic relief.	29.	Maenad with tambourine.	Bacchanalian vase by SALPION. Gaeta. <i>Mus. Borbonico</i> , I. 49. (Hauser No. 24.)
Sigillata.	30.	" " "	Arretine bowl. Loeb Collection, Pl. IX. 4.
Neo-Attic reliefs.	31.	Maenad with thyrsus.	Bacchanalian marble vase. Brit. Mus. (Townley Coll.). (Hauser No. 29 approximately.)
	32.	" " "	Bacchanalian terracotta bas-relief. Brit. Mus. (Townley Coll.). (Hauser No. 29.)
Sigillata.	33.	" " "	Arretine mould of Form 8. Arezzo. Brit. Mus. L 96. Walters, <i>C.R.P.</i> Fig. 23.
Neo-Attic relief.	34.	Maenad with torch.	Bacchanalian terracotta relief. Brit. Mus. (Townley Coll.).
Sigillata.	35.	" " "	Arretine mould of cylindrical vase. Stamped M. PEREN and TIGRANI. Brit. Mus. L 95. <i>Ad nat.</i>
Neo-Attic relief.	36.	Dancer with kalathistos.	Base of candelabrum. Albani, Rome. Reinach, <i>Reliefs</i> , III. 152.
Sigillata.	37.	" " "	Arretine bowl. Loeb Collection.
	38.	Pan with amphora.	Bacchanalian marble vase. Monte Cagnuolo (Lanuvium). Brit. Mus. (Townley Coll.).
Sigillata.	39.	Pan with thyrsus on Form 37.	Déch. 416.
Greek vase.	40.	Pigmyes and cranes.	Reinach, <i>Vases</i> , II. 295.
Sigillata.	41.	" " "	on mould. Lezoux. Déch. 437.





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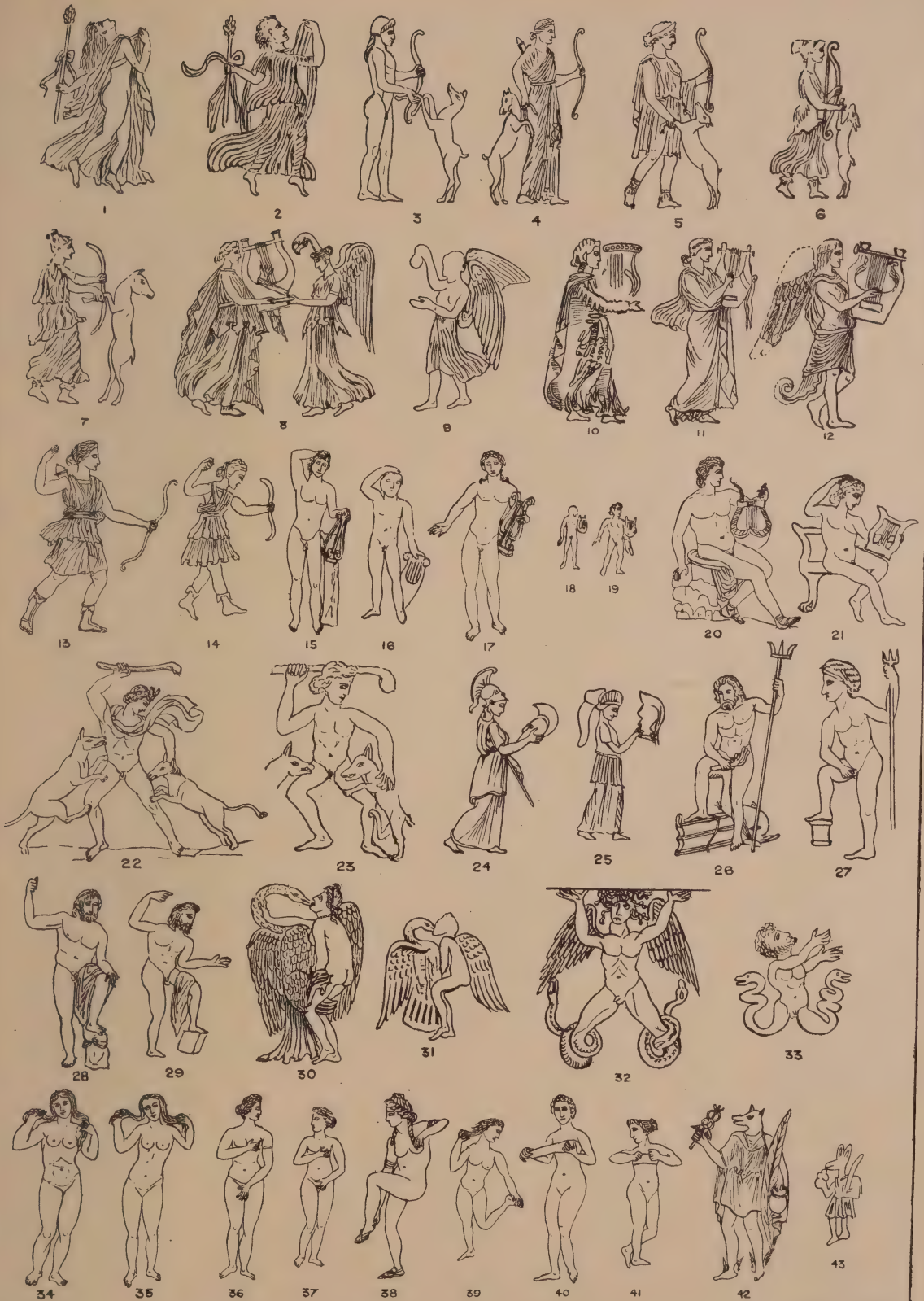
# PLATE XXXIV.

## FIGURE-TYPES.

Scale : The Sigillata figures are  $\frac{1}{2}$  size ; their prototypes in marble, terracotta or bronze are greatly reduced.

Terracotta.	1. Maenad. Campana, Pl. 48. (Reinach, <i>Reliefs</i> , II. 264.)
Sigillata.	2. " Form 30. GERMANVS. Richborough (C. R. Smith, <i>Richborough</i> , Pl. III.) and also at Vindonissa. Knorr, <i>Aislingen</i> , Textbild 6 A, B.
Engraved gem.	3. Apollo with hind. Archaic. M. Collignon, <i>Manuel d'Archéologie Grecque</i> , Fig. 129.
Marble.	4. Diana with hind. Vase by Sosibios the Athenian. Louvre.
"	5. " " Relief at the Villa Medici. Reinach, <i>Reliefs</i> , III. 308.
Sigillata.	6. " " Déchelette 63 and 63 A. Used by MERCATOR, FLORVS, SABINVS, NATALIS, CRVCVRO.
"	7. " " Déchelette 64. Used by ADVOCISVS, BANVS, CINNAMVS, DECIMANVS, DIVIXTVS.
Terracotta.	8. Victory pouring a libation to Apollo Musagetes (also in marble). Townley Collection, British Museum.
Sigillata.	9. " " " Déchelette 479. Used by MASCVVS.
"	10. Apollo Citharoedus. Form 30. London. Walters, C.R.P. Fig. 119 (M 421).
Marble.	11. Musa Citharoeda (Erato). Vase by SOSIBIOS. Louvre.
Sigillata.	12. " " " Puteolan ware. Pozzuoli. Walters, <i>op. cit.</i> Fig. 14 (L 73).
Marble.	13. Diana. Rome, Mus. Capit., vol. 3, Pl. 72. (Reinach, <i>Répertoire</i> , I. p. 307, No. 1224.)
Sigillata.	14. " Déchelette 67. Used by ALBVCIVS.
Marble.	15. Apollo with lyre. Palazzo Corsini, Florence. Reinach, <i>Répertoire</i> , II. i. p. 94, 5.
Sigillata.	16. " " Déchelette 45. Used by ADVOCISVS and LIBERTVS.
Marble.	17. " " Dresden. B. Leplat, Pl. 100, and Reinach, <i>Répertoire</i> , I. p. 254, No. 955 A.
Sigillata.	18. " " Déchelette 48. Used by BVTRIO.
"	19. " " Déchelette 47. Lezoux.
Marble.	20. Apollo Musagetes. Naples. Museo Borbonico, I. No. 265.
Sigillata.	21. " " Déchelette 52. Used by ARCANVS, DOECVVS and CINNAMVS.
Marble.	22. Actaeon. Actaeon Sarcophagus, Louvre. Reinach, <i>Répertoire</i> , I. 4.
Sigillata.	23. " Déchelette 76. Vienne and Rottenburg (Form 37).
Marble.	24. Athene handing a helmet and spear to Peleus. Sarcophagus (Marriage of Thetis). Zoega, <i>Bassirilievi antichi</i> , Pl. LII.
Sigillata.	25. " " " " " " Déchelette 84, 85 and 85 A. Form 30 Vienne ; Form 37 Rottweil, Rottenburg, Waldmössingen.
Marble.	26. Neptune. Rome, Lateran. Helbig, <i>Musées de Rome</i> , I. No. 667.
Sigillata.	27. " Déchelette 12. Used by LIBERTVS.
Marble.	28. Neptune disputing with Minerva. Eleusis. Reinach, <i>Répertoire</i> , II. p. 27, 4.
Sigillata.	29. " " " " " " Déchelette 14. Used by ALBVCIVS, CINNAMVS and SACER.
Marble.	30. Leda and the Swan. Venice, Museum of St. Mark. Reinach, <i>Répertoire</i> , I. p. 197, No. 716.
Sigillata.	31. " " Déchelette 9. Mould in white clay at St. Rémy en Rollat ; and decorated vase, Carnavalet Mus. ; used by SABINVS.
Fresco.	32. Anguiped Giant (one of the Aloadae), supporting a cornice. Grotto di Tifone, cemetery of the Tarquinii, Corneto. Orioli, <i>Monum. ined.</i> , vol. 3, Tav. IV.
Sigillata.	33. " " Déchelette 7. Used by CARENTINVS and LIBERTVS.
Bronze.	34. Venus Anadyomene. Florence. Millin, <i>Galerie mythol.</i> 175. (Apparently a copy of a picture by Apelles.)
Sigillata.	35. " " Déchelette 172. Used by CESORINVS and JVLINVS.
Marble.	36. Venus (Marine) of Medici. Florence. Reinach, <i>Répertoire</i> , I. p. 328, No. 1357.
Sigillata.	37. " " Déchelette 176. Used by ALBVCIVS. (Form 30 Margidunum.)
Bronze.	38. Venus fastening her sandal. Herculaneum. Roux and Barré, <i>Herculaneum et Pompéi</i> , VI. 13, 2.
Sigillata.	39. " " " Déchelette, 182. Used by CALVS, and on Form 37, style of GERMANVS, at Rottweil.
Bronze.	40. Venus adjusting her cestus. Herculaneum. Roux and Barré, <i>op. cit.</i> VI. 16, 3.
Sigillata.	41. " " Déchelette 185. Used by BVTRIO, CINNAMVS, DOECVVS and LIBERTVS.
Marble.	42. Anubis. Rome, Mus. Capit., vol. 3, Pl. LXXXV. ; and Daremberg and Saglio, I. Fig. 340.
Sigillata.	43. " Déchelette 300. Decorated vase at Vichy.





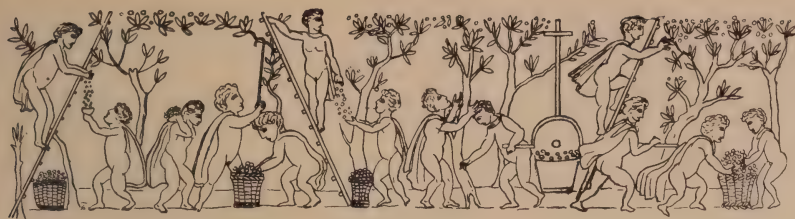


# PLATE XXXV.

## FIGURE TYPES.

Scale: the Sigillata figures are  $\frac{1}{2}$  size; their prototypes in marble, terracotta or bronze are greatly reduced.

- |               |  |
|---------------|--|
| Marble.       | 1. Putti gathering olives. Sarcophagus at Arles. Millin, <i>Galerie mythologique</i> , Pl. LXXXV. 141.   |
| Sigillata.    | 2. Cupids gathering grapes. Form 37, SATTO FECIT. Mainspitze. Fölzer, V. 3.  |
| „             | 3 and 4. Cupids gathering grapes. F 37, style of SATTO. Mainz. Fölzer, V. 25.  |
| Marble.       | 5. Rustic butcher. Louvre. Reinach, <i>Répert.</i> I. 145.   |
| Sigillata.    | 6. „ „ Déch. 560. Mould, La Graufesenque, and D 560 A Form 37 Banassac, F 78 Rottweil (D 560) style of GERMANVS, Knorr, <i>Rottweil</i> , 1907, XVI. 4, and F 30 Rottweil (D 560 A). Knorr, <i>op. cit.</i> XVI. 11. |
| Marble.       | 7. Hercules and the Nemean lion. Florence. Reinach, <i>Répert.</i> I. 463.   |
| Sigillata.    | 8. „ „ Déch. 466. Form 37 Banassac, and Rottweil (Knorr, <i>Rottweil</i> , 1907, XIV. 9).  |
| Marble.       | 9. Farnese Hercules. An imitation of a Hercules by Lysippe. Millin, <i>Galerie mythol.</i> CXXII. 448.   |
| Sigillata.    | 10. Farnese Hercules. Form 37. Style of CIBISVS. Rottweil (Knorr, <i>Rottweil</i> , 1907, XXIV. 3.) Cp. Déch. 445, F 37 PVTRIV Lezoux.   |
| Bronze.       | 11. Colossal Hercules (Ercole Mastai). Rome. Reinach, <i>Répert.</i> II. i. p. 212, 9.   |
| Sigillata.    | 12. Youthful Hercules. Déch. 444. Form 37 Lezoux.  |
| Greek vase.   | 13. Fisherman. Pelike in Austrian Museum, Vienna. Fürtwängler and Reichhold, <i>Griech. Vasenmalerei</i> , Fig. 101.   |
| Sigillata.    | 14. Fisherman. Déch. 557. Form 37 L COSI Rottweil (Knorr, <i>Rottweil</i> , 1907, XIV. 1) and GERMANI, Form 37 Clermont Ferrand.   |
| Bronze.       | 15. Alexander. Naples. Reinach, <i>Répert.</i> I. 508.   |
| Sigillata.    | 16. Alexander slaying the lion. Arretine ware. Mould, M. PEREN. Arezzo. Brit. Mus. L 101. Walters, <i>C.R.P.</i> Fig. 25.  |
| „             | 17. Alexander (?). Déch. 157. Form 37. Used by ALBVCIVS, BANVVS, EPPILLVS, ILLIXO, IVLICCVS, LASTVCA, PATERNVS.  |
| Stucco.       | 18. Hector and Ajax. Iliac Table, found in ruins of old temple on the Appian Way, at Frattocchia. Millin, <i>Galerie mythol.</i> CL.   |
| Sigillata.    | 19. Hector and Ajax. Déch. 122 and 123. Used by CINNAMVS, PVTRIV and SACER.  |
| Marble.       | 20. Polymnia. Rome, Vatican. Reinach, <i>Répert.</i> I. 274, 6.  |
| Sigillata.    | 21. „ Déch. 555. Used by ALBVCIVS, IANVARIS, LIBERTVS and PVTRIV.  |
| „             | 22. „ Déch. 554. Plaquette, Vichy.   |
| Marble.       | 23. Niobid. Villa Albani. Baumeister, <i>Antik. Denkmäl.</i> vol. iii. Fig. 1759.  |
| Sigillata.    | 24. „ Déch. 489. Used by ALBVCIVS and LIBERTVS.  |
| Marble.       | 25. Aesculapius. Louvre. Reinach, <i>Répert.</i> I. 148, 4.  |
| Sigillata.    | 26. „ Déch. 523. Used by CINNAMVS, IVSTVS, LIBERTVS.   |
| Coin (Brass). | 27. Victory. Coin of Nero, stamped ΡΟΔΙΩΝ (Rhodes). Mus. Pisan. VI. Millin, <i>Gal. myth.</i> XXXIX. 167.  |
| Sigillata.    | 28. Victory. Déch. 475. F 37. Stamped PATERN FE. Lezoux.   |



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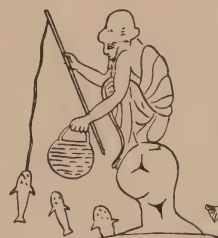
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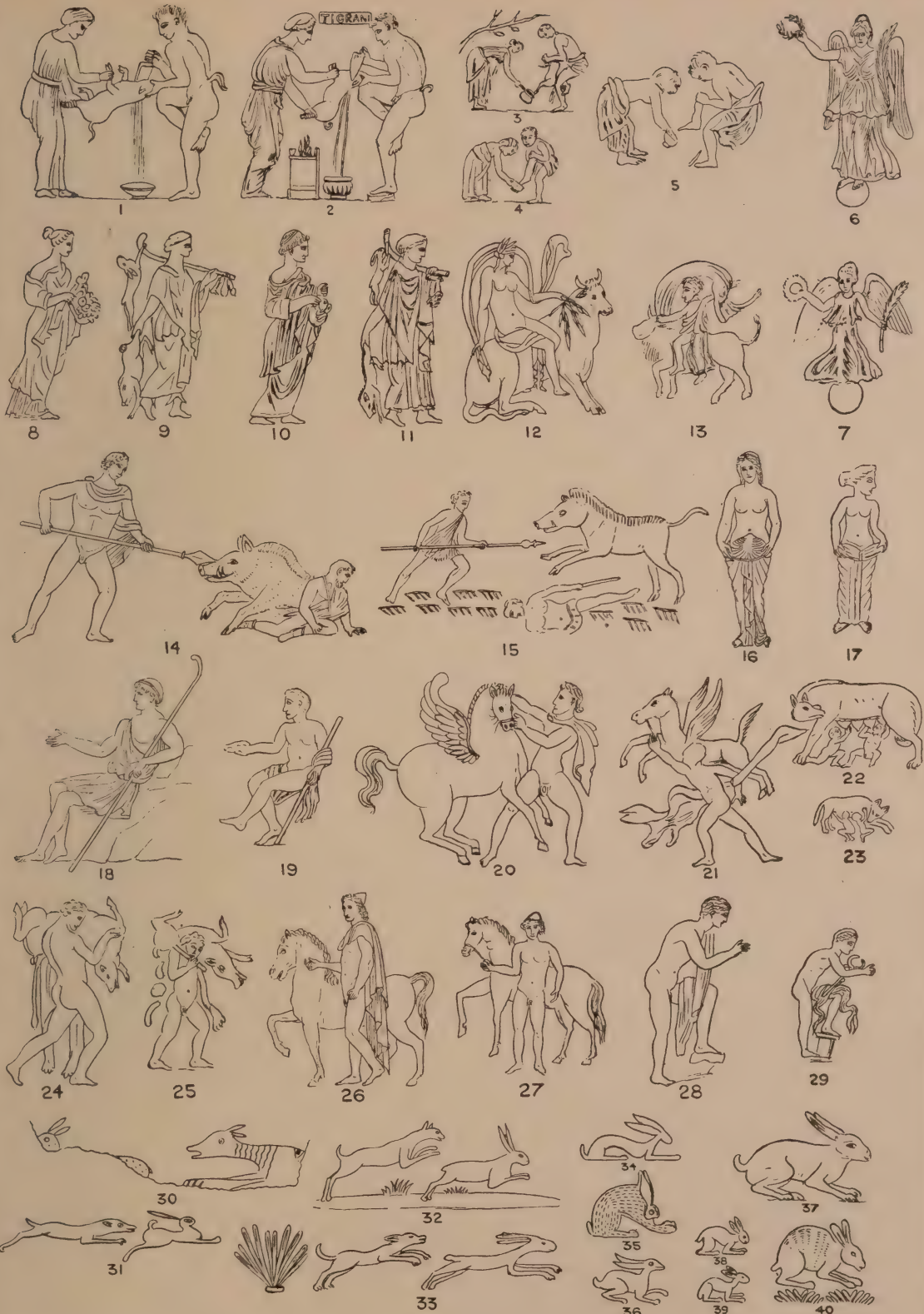
# PLATE XXXVI.

## FIGURE TYPES.

Scale: the Sigillata figures are  $\frac{1}{2}$  size; their prototypes in marble, terracotta or bronze are greatly reduced.

- |                      |   |
|----------------------|---|
| Marble.              | 1. Sacrifice of pig in a cycle depicting Eleusinian mysteries. Naples, <i>Mus. Borbonico</i> .  |
| Sigillata.           | 2. Sacrifice of pig. Arretine Sigillata. Arezzo. Walters, <i>C.R.P.</i> L 93, Fig. 21.  |
| Cameo.               | 3. " " Cameo. Déchelette I. Fig. 143.   |
| Metal.               | 4. " " Metal handle. Bazzano near Bologna. Schreiber, <i>Alex. Toreutik.</i> p. 349, Fig. 88, and Déchelette I. Fig. 144.                   |
| Sigillata.           | 5. Sacrifice of pig. Déch. 569 and 569 bis. Form 29. Varennes sur Allier.   |
| Bronze.              | 6. Victory. Cabinet de Berlin. Beger, L., <i>Thesaurus brandenburgensis selectus</i> , 1696, III. 286. Reinach, <i>Répert.</i> II. 388, 3.  |
| Sigillata.           | 7. Victory. Déch. 478. Form 37 Vichy.   |
| Terracotta.          | 8 and 9. The Seasons (Spring and Winter). Campana plaque, Pl. 62, and Brit. Mus. Terracottas D 583, Pl. 42.                                 |
| Sigillata.           | 10 and 11. The Seasons (Spring and Winter). Crater from Capua (? Puteolan). Walters, <i>C.R.P.</i> Pl. VI. L 54.                            |
| Silver.              | 12. Europa on Bull. Frieze on silver bucket found near Vienne (Isère), Congrès archéol. de Vienne, p. 347, and Bonn. Jahrb. cxviii. p. 196. |
| Sigillata.           | 13. Europa on Bull. Déch. 10. Form 69 Château d'Aoste (Isère).  |
| Marble.              | 14. Meleager and the Boar. Sarcophagus, Woburn Abbey. Woburn Catal. p. 35.  |
| Sigillata.           | 15. Meleager and the Boar. Déch. 628 and 839. Form 30. St Germain Mus. (Déch. I. Fig. 133.)   |
| Marble.              | 16. Nymph holding shell. Campana, Louvre 455. Reinach, <i>Répert.</i> II. p. 405, 3.  |
| Sigillata.           | 17. Nymph holding shell. Déch. 193. 37 mould Lezoux (Plicque Coll.).  |
| Marble.              | 18. Paris receiving diadem from Minerva. Winckelmann, <i>Monum. ined.</i> No. 113; Millin, <i>Gal. mythol.</i> 536.                         |
| Sigillata.           | 19. Paris. Déch. 41 (not Mars or Vulcan). Form 37 Vichy and Cannstatt.  |
| Silver coin.         | 20. Bellerophon and Pegasus. Denarius of Corinth of the Tadia family. Millin, <i>Gal. myth.</i> 390.  |
| Sigillata.           | 21. Bellerophon and Pegasus. Déch. 487 and 487 A. Used by LIBERTVS and BVTRIO.  |
| Marble.              | 22. Wolf suckling Romulus and Remus. Sarcophagus, Vatican. Amelung ( <i>Vatikan</i> ), II. 9, 37 B.   |
| Sigillata.           | 23. Wolf suckling Romulus and Remus. Déch. 494. Form 29 La Graufesenque and Rottweil, Form 37 Rottweil.                                     |
| Terracotta.          | 24. Herakles (at the wedding of Peleus and Thétis). Campana plaque, Pl. 62, and Brit. Mus. Terracottas D 583, Pl. 42.                       |
| Sigillata.           | 25. Herakles. Déch. 470. Form 37, St. Germain Mus.  |
| Marble.              | 26. Castor. Rome. Mus. Capit. Reinach, <i>Répert.</i> I. p. 485, 3.   |
| Sigillata.           | 27. " Déch. 485, 486. Form 37 Angers and Vienne.  |
| Marble.              | 28. Hermes. Phaethon Sarcophagus. Ny. Carlsberg, Denmark. <i>Annali d. Inst.</i> 1869, Pl. F, and Reinach, <i>Reliefs</i> , II. 182.        |
| Sigillata.           | 29. Hermes. Déch. 288. Used by LIBERTVS, PVTRIV, IANVARIS and ALBVCIVS.   |
| Pottery.             | 30. Dog chasing Hare. Fragment from Mycenae. Loeschcke, <i>Myken. Vasen</i> , 411.  |
| "                    | 31. Dog chasing Hare. Fikellura vase, Rhodes. Cat. Fitzwilliam Mus. No. 42.   |
| Fresco.              | 32. " " Pompeii, house of the picture-inscriptions. E. Presuhn, <i>Pompeii</i> , 1882.  |
| Sigillata.           | 33. Dog chasing Hare. Form 37. South Gaulish. Flavian style. May, <i>Silchester</i> , XVIII. A.   |
| Granite and papyrus. | 34. Sitting hare. Egyptian hieroglyph.  |
| Pottery.             | 35. Sitting hare. Black-figured kylix, Vulci. Cat. Fitzwilliam Mus. Pl. XXIV.   |
| "                    | 36. " Red-figured vase. Athen. Mitteil. 1884, Taf. I.   |
| Bronze.              | 37. " Herculaneum. Reinach, <i>Répert.</i> II. 758.   |
| Sigillata.           | 38. " Déch. 944. Form 11 VOLVS and Form 30 MASCLVS.   |
| "                    | 39. " Déch. 951 reversed. Used by MEDDILLVS and L. Cos. VIRILIS.  |
| "                    | 40. Sitting hare. Déch. 941. Used by BIRACILLVS.  |





# PLATE XXXVII.

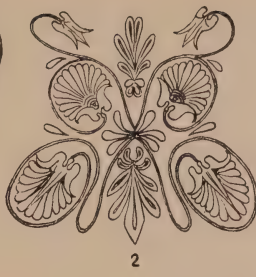
## EVOLUTION OF ST. ANDREW'S CROSS, NAUTILUS *MOTIF*, ETC.

1. Handle-ornament on red-figured cyathos by PISTOXENOS. *Arch. Jahrbuch*, 1912, p. 24.
2. " " red-figured amphora by PAMPHAIOS, Louvre. Pottier, *Catal. des vases antiques du Louvre*.
3. Handle-ornament, red-figured amphora, Vienna. A de Laborde, *Coll. de vases grecs de M. le comte de Lemberg*, 1813-24, ii. Pl. 1.
4. St. Andrew's Cross *motif* on Claudian Form 29. Stamped of AQVITANI. Vindonissa. Knorr, *Aislingen*, Pl. XVII. 4.
5. St. Andrew's Cross *motif* on Form 29 by MOMMO. Pompeii. Atkinson, *Pompeii*, No. 9.
6. " " " Form 29, stamped of NIGRI, London. Walters, *C.R.P.* Pl. XL. 2.
7. " " " Form 29, stamped of PASSENI, London. *Ibid.* Pl. XL. 3.
8. Paper Nautilus on Mycenaean vase from Ermen, Egypt. Brit. Mus. *Ad nat.*
9. Schematized Nautilus on wall-painting, Mycenae.
10. " " Kumbet Tomb, Phrygia.
11. Cuttlefish on gold plate, Mycenae. Schuchardt, Schliemann's Excavations, Fig. 190.
12. Nautilus *motif*, lower frieze of Arretine crater, stamped XANTHI, Foxton. *Camb. Proc., Camb. Antiq. Soc.* xii. 111.
13. " " lower frieze of Form 29. Tiberian. Strasbourg. Henning, *Strasbourg*, Pl. XX. 1.
14. " " lower frieze of Form 29. Tiberian. Aislingen. Knorr, *Aislingen*, Pl. I. 3.
15. Egyptian lotus border, XVIII. Dynasty.
16. Lotus-border from Cameiros, Rhodes (c. Seventh Century). Brit. Mus.
17. Mycenaean vase, Phylakopi. *Journ. Hellen. Studies*, Suppl. Paper No. 4, 1904. *Excavations at Phylakopi*.
18. "A common feature of Mycenaean decoration." *Ibid.* Pl. XVII. 17.
19. Lotus-border on Rhodian plate. Riegl, *Stilfragen*, Fig. 72.
20. Arrow-heads on Form 29. Stamped CARILLI F. Strasbourg. Knorr, *Aislingen*, Pl. VIII. 3.
21. " " Form 29. By MOMMO. Pompeii. Atkinson, *Pompeii*, No. 22.
22. " " Form 29. By MOMMO. Pompeii. *Ibid.* No. 9.
23. " " Form 37. By MEMOR. Pompeii. *Ibid.* No. 74.
24. " " Form 29. Stamped GERMANI OF. Strasbourg. Henning, *Strasbourg*, Pl. XX. 8.
25. " " Form 29. Stamped of IVCVN. Rottweil. Knorr, *Rottweil*, 1907, Pl. II. 2.
26. " " Form 29. Stamped ME•ILLVS. London. Walters, *C.R.P.* Pl. XXXIX. 2.
27. " " Form 29. Stamped ME•ILLVS. London. Walters, *C.R.P.* Pl. XXXIX. 1.
28. " " Form 29. Stamped of FASEN. London. Walters, *C.R.P.* Pl. XXXIX. 10.
29. " " Form 29. Stamped of COTOL. Wroxeter. Bushe-Fox, *Wroxeter*, Pl. XIII. 1.
30. " " Form 37. Stamped PRIMI. Wroxeter. *Ibid.* Pl. XIII. 4.
31. " " Form 29. Stamped PRIMI MA. London. Lambert, *Arch.* 66, Pl. XXVI. 2.
32. " " Form 37. Stamped CRVCVRO. Rottweil. Knorr, *Rottweil*, 1907, Pl. XI. 1.
33. " " Form 37. Stamped MERCATO. Silchester. May, *Silchester*, Pl. XXV. 5, 6.
34. " " Form 37. Luxeuil ware. Fölzer, I. 10.
35. " " Form 37. Allied to CRVCVRO, Vespasianic. Rottweil. Knorr, *Rottweil*, 1907, Pl. XII. 1.
36. " " Form 37. Domitianic. Rottenburg. Knorr, *Rottenburg*, Pl. I. 17.
37. Pinnate leaves on Form 29. Stamped LICINVS F. Hofheim. Ritterling, *Hofheim*, Pl. XXIII. 2.
38. " " Form 29. Stamped of ARDACT. Vindonissa. Knorr, *Aislingen*, Pl. XVII. 3.
39. " " Form 29. Stamped ALBVS FE. Aislingen. *Ibid.* Pl. III. 2.
40. " " Form 29. Strasbourg. Henning, *Strasbourg*, Pl. XXIII. 13.
41. " " Form 29. Strasbourg. *Ibid.* Pl. XXIII. 9.
42. " " Form 29. London. Walters, *C.R.P.* M 260.
43. " " Form 29. (?) Lezout ware. *Ibid.* M 1014.
44. Six-bladed tufts on Form 30. Strasbourg. Henning, *op. cit.* Pl. XIX. 7.
45. " " Form 29. London. Walters, *C.R.P.* M 344.
46. Scale pattern (rock crystal and gold), sword pommel, Mycenae. Schuchardt, Schliemann's Excavations, Fig. 250.
47. " " Mycenaean jug. Mycenae. *Ibid.* Fig. 297.
48. " " Mycenaean amphora. Jalyos. Furtwängler and Loeschke, *Myken. Vasen*. 1886.
49. " " Corinthian vase from Caere. Pottier, *Cat. des vases antiques du Louvre*, Fig. 235.
50. " " on Form 29. Claudian. Margidunum. *Ad nat.*
51. " " on Form 29. London. Walters, *C.R.P.* M 311.
52. Net pattern on Form 30. Hofheim I. Ritterling, *Hofheim*, Pl. XXVII. 20.
53. " " Form 30. Silchester. May, *Silchester*, Pl. XV. B.
54. Cordate leaf and stipule. Mycenaean vase. Nicole, *Cat. des vases peints du musée nat. d'Athènes*. Frontispiece. Paris, 1911.
55. " " " Mycenaean bowl. Enkomi. Walters, *Greek vases in the British Museum*, C 678.
56. Ivy leaf and berries. Altar of Lusinia Primigenia. Reinach, *Répertoire*, I. 121.
57. Cordate leaf and stipule on Form 29. London. Walters, *C.R.P.* M 243.
58. " " " Form 29. Aislingen. Neronic. Knorr, *Aislingen*, Pl. II. 10.
59. " " " Form 29. Aislingen. Claudian. *Ibid.* Pl. II. 8.
60. Cuneiform leaf and stipule on Form 29. Stamped of BASSI COELI. Xanten. Walters, *C.R.P.* M 4.
61. Cordate leaf and stipule on Form 29. Hofheim I. Claudian. Ritterling, *Hofheim*, Pl. XXIV. 3.
62. " " " Form 29. Hofheim I. Stamped MOD. Claudian. *Ibid.* Pl. XXIV. 9.
63. Cuneiform leaf and stipule on Form 29. London. Walters, *C.R.P.* M 367.
64. " " " Form 29. London. Stamped ME•ILLVS. Vespasianic. *Ibid.* M 308.
65. " " " Form 37. Aislingen. Vespasian-Domitian. Knorr, *Aislingen*, Pl. XII. 3.
66. Pomegranate on Assyrian terracotta with name of Nasir Bani Pal. Brit. Mus. Riegl, *Stilfragen*, Fig. 36.
67. Pomegranate frieze on Cyrenaic vase. Perrot and Chipiez, *Hist. de l'Art* IX. Fig. 242.
68. Pomegranate in lotus border. Altar of Hapi. Brit. Mus.
69. Pomegranate branch held by figure in Etruscan mural painting, Grotte delle Lastre dipinte, Cervetri. Now in Brit. Mus.
70. Pomegranates in series on Form 29. Stamped of BASSI CO. Vindonissa. Knorr, *Aislingen*, Pl. XVIII. 13.
71. Pomegranates on tripartite standard ornament on Form 30. Hofheim. Claudian. Ritterling, *Hofheim*, Pl. XXVI. 2, and XXVII. 5.
72. Pomegranate wreath on Form 29. Aislingen. Knorr, *Aislingen*, Pl. IV. 5.
73. Lanceolate bud from capital of Temple of Athene at Priene.
74. " " on Form 29. Stamped of BASSI COELI. Xanten. Claudius-Nero. Walters, *C.R.P.* M 4.
75. " " on Form 29. Stamped BALBVS F. Aislingen. Caligula. Knorr, *Aislingen*, Pl. III. 16.
76. " " on Form 29. Stamped CARILLI F. Strasbourg. Early Vespasian. *Ibid.* Pl. VIII. 3.
77. Cordate bud from handle-ornament of black-figure Greek vase.
78. " " on Form 29. Stamped of PATRIC. Strasbourg. Knorr, *Aislingen*, Pl. VIII. 2.
79. " " on Form 30. Hofheim I. Ritterling, *Hofheim*, Pl. XXVII. 21.
80. Bronze Greek cyathos (prototype of Form 27). Charvet, *Enseignement des arts décoratifs*, Fig. 230.
81. Olive wreath and bead-rows, silver patera of Africa. Bosco Reale, Hérón de Villefosse, *Mon. Piot*, IV.
82. Straight wreath on Form 29. Hofheim I. Claudian. Ritterling, *Hofheim*, Pl. XXIV. 1.
83. Chevron wreath on Mycenaean jug from Phylakopi. *Journ. Hellenic Studies*, Suppl. Paper No. 4, 1904, Fig. 101.
84. Chevron wreath on Form 37. Stamped FELICIO. Wroxeter. Bushe-Fox, *Wroxeter II*. 1913, Pl. XIII. 11.
85. Chevron wreath on Form 37. Stamped ME•ILLVS. London. Walters *C.R.P.* M 201.





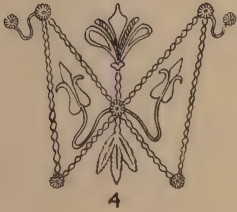
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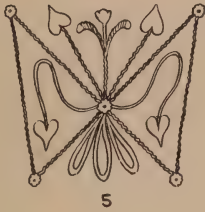
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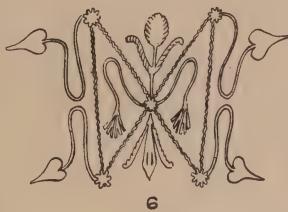
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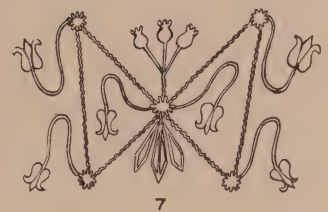
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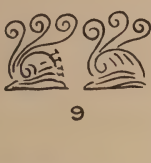
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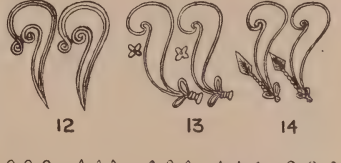
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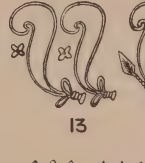
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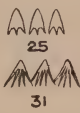
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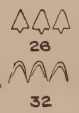
18



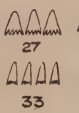
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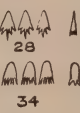
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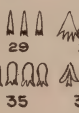
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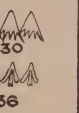
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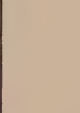
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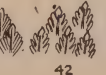
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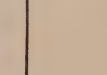
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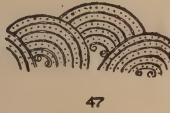
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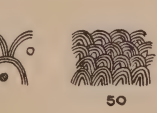
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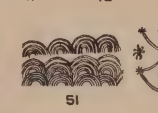
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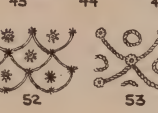
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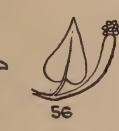
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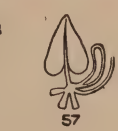
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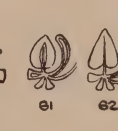
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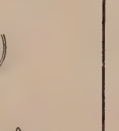
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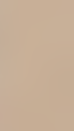
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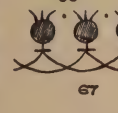
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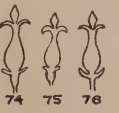
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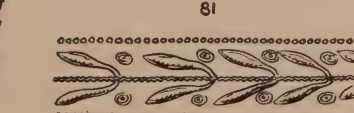
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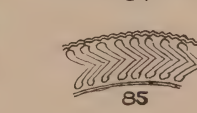
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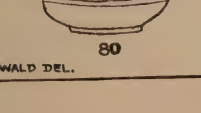
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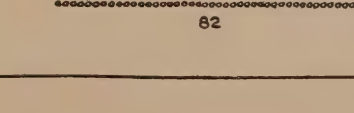
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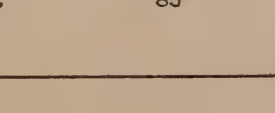
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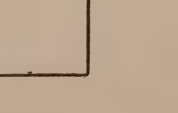
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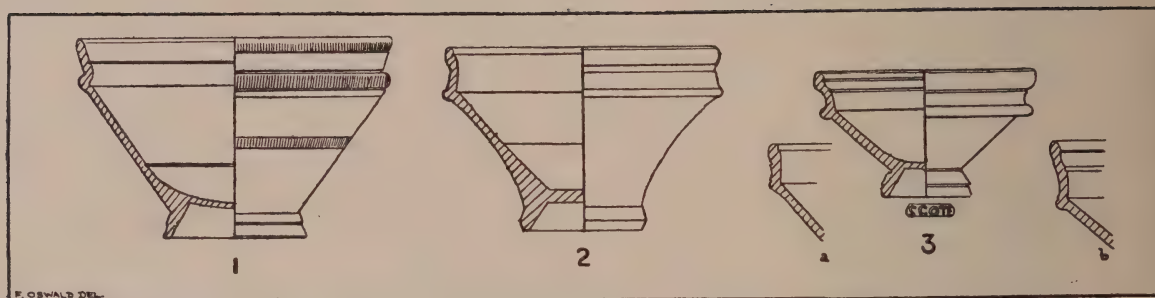


86



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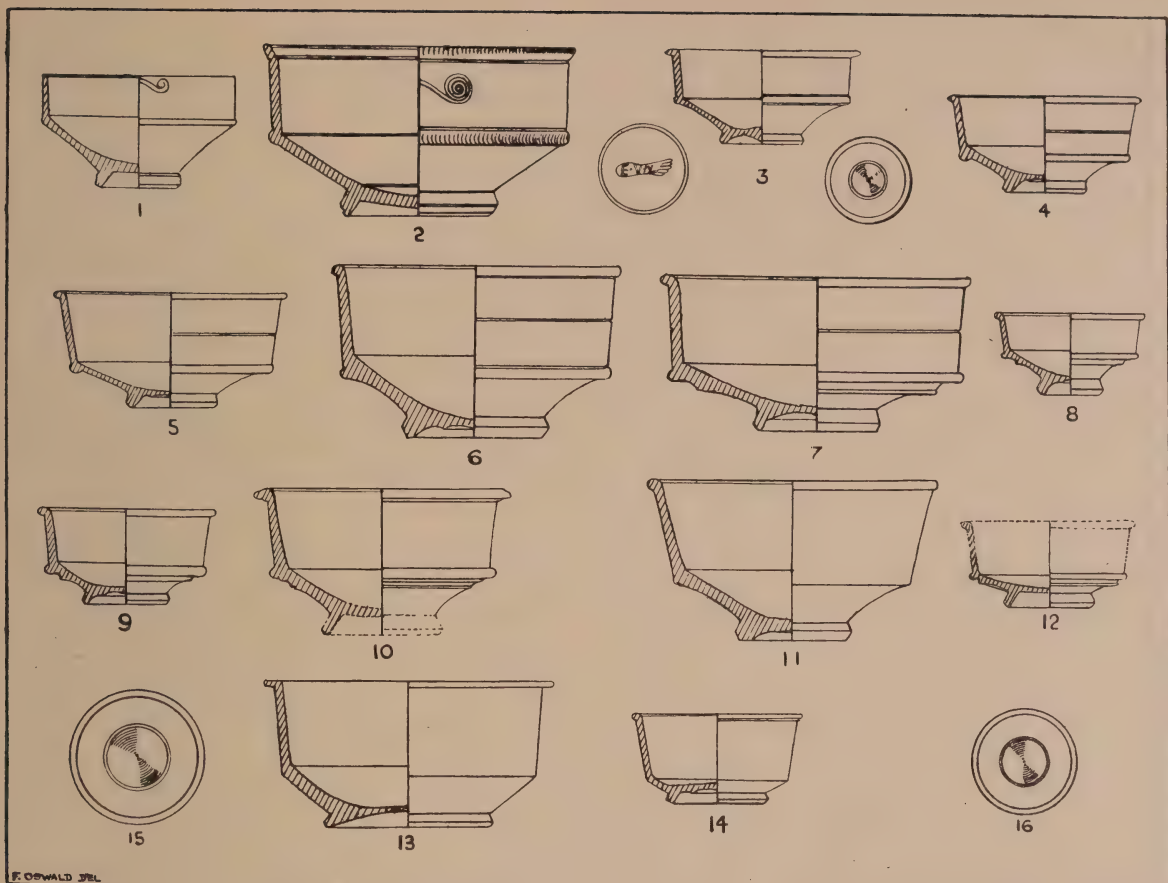




RITTERLING TYPE 5.

1. Loeschcke Type 8 Ab. Haltern. Augustan. Loeschcke, *Haltern*, Pl. X. 8 Ab.
2. Ritterling Type 5. Hofheim. Claudian. Ritterling, *Hofheim*, Pl. XXXI. 5.
3. Aislingen. Tiberio-Claudian. Knorr, *Aislingen*, Pl. XVI. 1-3, and Pl. XIV. 97 (stamp).

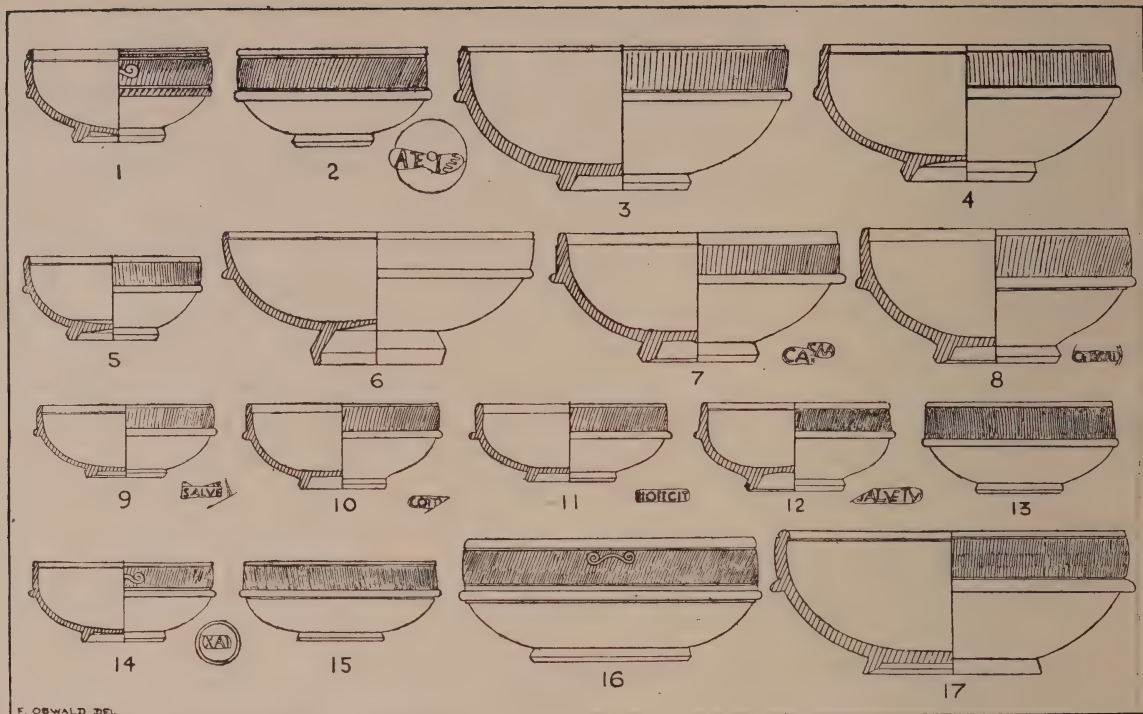
Scale  $\frac{1}{3}$ .



## RITTERLING TYPE 9.

1. Loeschcke 15 A. Haltern. Augustan. Loeschcke, *Haltern*, Pl. X. 15 A.
2. Loeschcke 15 B. Haltern. Augustan. *Ibid.* Pl. X. 15 B.
3. Italian cup, Nemi. Tiberian. Nottingham Castle. (*Ad nat.*)
4. Mainz. Stamped OF MODES. Claudian. Geissner 2, Fig. 3.
5. Ritterling 9 B. Hofheim. Claudian. Ritterling, *Hofheim*, Pl. XXXI. 9 B.
6. Ritterling 9 A. Hofheim. Claudian. *Ibid.* Pl. XXXI. 9 A.
7. Mainz. Stamped ROGA (tus). Tiberio-Claudian. Geissner 2, Fig. 4.
8. Mainz. Stamped (? Mac) CA. Tiberio-Claudian. *Ibid.* Fig. 9.
9. Mainz. Stamped OF . . . . Claudian. *Ibid.* Fig. 5.
10. Aislingen. Claudian. Knorr, *Aislingen*, Pl. XVI. 5.
11. Silchester. Stamped OF MAIO. May, *Silchester*, Pl. XXXI. 15.
12. Aislingen. Stamped MACA. Tiberio-Claudian. Knorr, *Aislingen*, Pl. XVI. 4.
13. Dragendorff Form 8.
14. Mainz. Stamped CASIVS. Claudian. Geissner 2, Fig. 6.
15. Hofheim I. Exterior base. Ritterling, *Hofheim*, Pl. XXVIII. 53.
16. Margidunum. Exterior base. (*Ad nat.*)

Scale  $\frac{1}{3}$ .

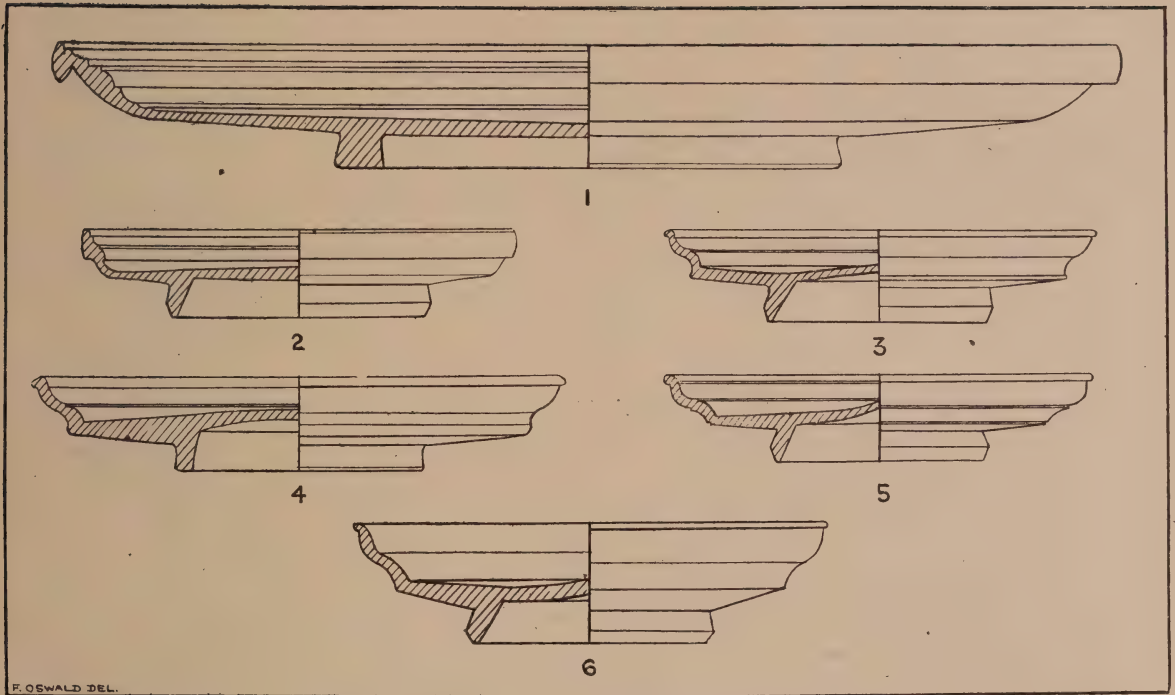


DRAGENDORFF FORM 24/25.

1. Loeschcke Type 12. Arretine. Haltern, later period. Loeschcke, *Haltern*, Pl. X. 12.
2. Arretine. Stamped ATEI "in planta pedis." London Bridge Station ("Greenwich Railway"), 1841. Bethnal Green Museum. (*Ad nat.*)
3. Ritterling Type 6. Hofheim I. Stamped AVE, CENNATVS, ICNVS, MOMO, PERRVS F, OFI PR, SECVND, VAPVSO. Claudian. Ritterling, *Hofheim*, Pl. XXXI. 6.
4. Mainz. Stamped BIO FE. Claudian. Geissner 2, Fig. 2.
5. Mainz. Stamped IIVA (AVE). Claudian. *Ibid.* Fig. 8.
6. Mainz. Stamped ARDACI. Claudian. *Ibid.* Fig. 1.
7. Aislingen. Stamped CAS MA. Claudian. Knorr, *Aislingen*, Pl. XVI. 8.
8. Aislingen. Stamped OF PATRI. Claudian. *Ibid.* Pl. XVI. 9.
9. Aislingen. Stamped SALVE. Claudian. *Ibid.* Pl. XVI. 12.
10. Aislingen. Stamped COTTV. Claudian. *Ibid.* Pl. XVI. 10.
11. Aislingen. Stamped BIO FECIT. Claudian. *Ibid.* Pl. XVI. 11.
12. Aislingen. Stamped SALVETV. Claudian. *Ibid.* Pl. XVI. 13.
13. Strasbourg. Stamped TE[rtius]. Henning, *Strasbourg*, Pl. XVII. 16.
14. Colchester. Arretine. Stamped XAI[.]. (Xanthi). (*Ad nat.*)
15. Strasbourg. Stamped sco[tius]. Henning, *Strasbourg*, Pl. XVII. 18.
16. Strasbourg. Stamped ALBINI. *Ibid.* Pl. XVII. 19.
17. Silchester. Stamped COTVLVS. May, *Silchester*, Pl. XXXI. 16.

Scale  $\frac{1}{4}$ .





DRAGENDORFF FORM 16.

1. Loeschcke Type 1 B. Mainz. Stamped P. ATTIL. Augustan. Loeschcke, *Haltern*, Abb 1, 7.
2. Loeschcke Type 1 A. Haltern. Augustan. *Ibid.* Pl. X. 1 A.
3. Ritterling Type 3 A. Hofheim. Claudian. Ritterling, *Hofheim*, Pl. XXXI. 3 A.
4. Ritterling Type 3 B. Hofheim. Claudian. *Ibid.* Pl. XXXI. 3 B.
5. Mainz. Stamped OFI MACCAR. Tiberio-Claudian. Geissner 2, Fig. 5.
6. York. Stamped OF ARRI. May, *York*, Pl. V. 9.

Scale  $\frac{1}{3}$ .

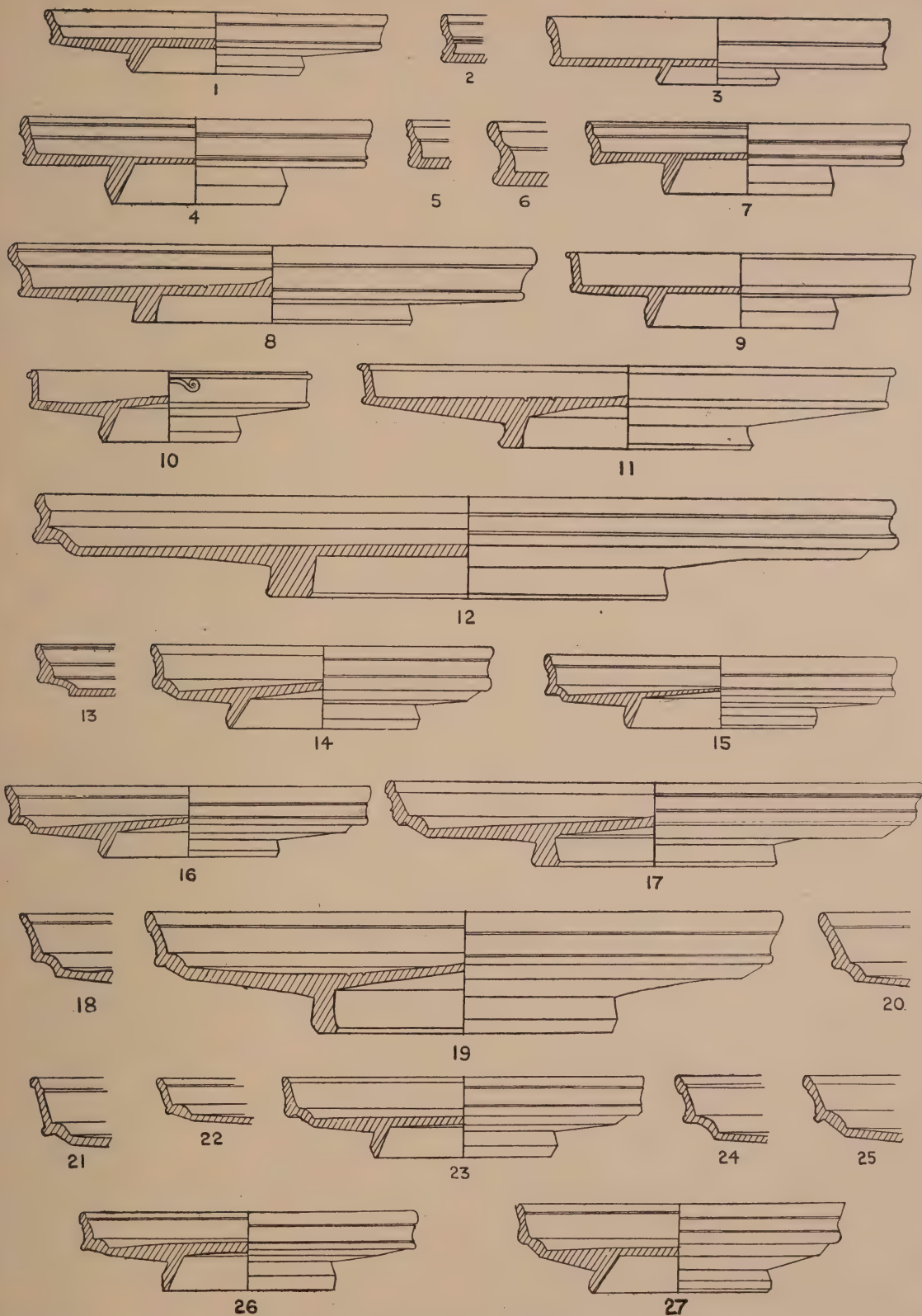
## PLATE XLII.

### DRAGENDORFF FORMS 17 AND 15/17.

(Tiberian and Claudian examples.)

1. Loeschcke Type 2 A. Haltern. Augustan. Loeschcke, *Haltern*, Pl. X. 2 A.
2. Loeschcke Type 2 A, fragment. Haltern. Augustan. *Ibid.* Abb. 2, 1.
3. Dragendorff Type 17.
4. Aislingen. Tiberio-Claudian. Knorr, *Aislingen*, Pl. XV. 6.
- 5 and 6. Aislingen. Fragments. Tiberio-Claudian. *Ibid.* Pl. XV. 10, 11.
7. Xanten. Stamped OFIC BILI. Tiberian. Hagen, *Einzelfunde von Vetera*, 1908-9, *Bonn. Jahrb.* 119, Pl. XX. 2.
8. Mainz. Stamped SILVANI. Claudian. Geissner 2, Fig. 2.
9. Aislingen. Tiberian. Knorr, *Aislingen*, Text Fig. 1.
10. Mainz. Stamped SALVETV. Tiberio-Claudian. Geissner 2, Fig. 13.
11. Mainz. Stamped BALBVS. Tiberio-Claudian. *Ibid.* Fig. 1.
12. Loeschcke Type 3 B. Haltern. Augustan. Loeschcke, *Haltern*, Pl. X. 3 B.
13. Loeschcke Type 3 B, fragment. Haltern. Augustan. *Ibid.* Abb. 2, 8.
14. Ritterling Type 4 A. Hofheim. Claudian. Ritterling, *Hofheim*, Pl. XXXI. 4 A.
15. Mainz. Stamped OF ARDA. Claudian. Geissner 2, Fig. 6.
16. Strasbourg. Stamped OF BASSI. Claudian. Henning, *Strasbourg*, Pl. XVIII. 21.
17. Aislingen. Stamped OFIC[. Tiberio-Claudian. Knorr, *Aislingen*, Pl. XV. 17.
19. Ritterling Type 4 B. Hofheim. Claudian. Ritterling, *Hofheim*, Pl. XXXI. 4 B.
- 18, 20-22, 24, 25. Hofheim. Claudian. *Ibid.* Abb. 45, 10, 9, 11, 12, 8, 13.
- 23, 26, 27. Aislingen. Claudian. Knorr, *Aislingen*, Pl. XV. 15, 7, 13.

Scale  $\frac{1}{3}$ .





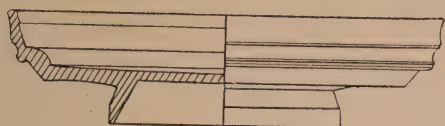
## PLATE XLIII.

### DRAGENDORFF FORM 15/17 (*continued*).

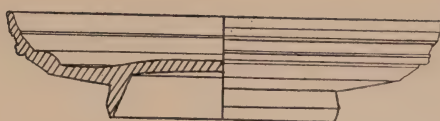
(Claudian and later examples.)

- 28, 29. Aislingen. Knorr, *Aislingen*, Pl. XV. 12, 14.
30. Colchester. Stamped by AQVITANVS. Claudian. Colchester Museum, No. 255.
31. Mainz. Stamped DARRA F. Claudian. Geissner 2, Fig. 3 A.
32. Mainz. Stamped LENTV F. Nero-Vespasian. *Ibid.* Fig. 9 A.
33. Mainz. Stamped OF PRIMI. Claudius-Vespasian. *Ibid.* Fig. 4.
34. Mainz. Stamped PRIMVS F. Claudius-Vespasian. *Ibid.* Fig. 3.
35. Silchester. Stamped OF FELICIS. Claudius-Vespasian. May, *Silchester*, Pl. XXXII. 29.
36. Mainz. Stamped OF VITA. Nero-Flavian. Geissner 2, Fig. 9.
37. Mainz. Stamped IVLLIN. Flavian. *Ibid.* Fig. 7.
38. Newstead I. Stamped SABINVS F. Flavian. Curle, *Newstead*, Pl. XXXIX. 2.
39. Ludowici Type Tb'. Rheinzabern grave. Ludowici, Rheinzabern.
40. Wiesbaden Kastell. Domitian-Trajan. Ritterling, *Das Kastell Wiesbaden*, Pl. XIII. 2.
41. Wroxeter. Stamped BIRAC. Domitian-Trajan. Bushe-Fox, *Wroxeter II*. Type 83, p. 43.
42. Trèves pottery (?). Fragment. Fölzer, Pl. XI. 38.
43. Form 31 with quarter-round moulding. Corbridge. (Also at Rough Castle, stamped DOVECCV). Antonine. *Corbridge Report*, No. 115.

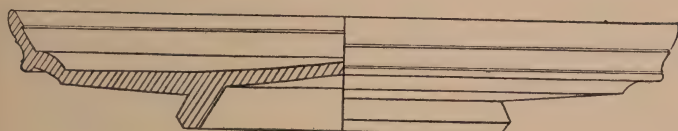
Scale  $\frac{1}{3}$ .



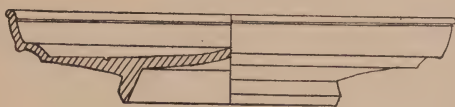
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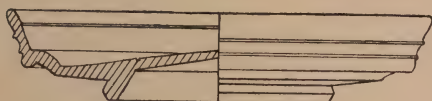
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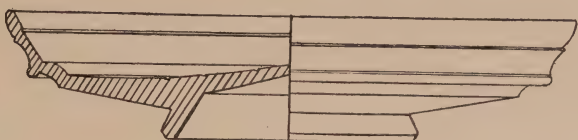
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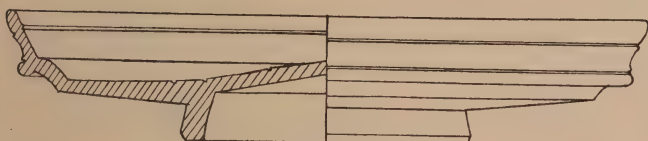
31



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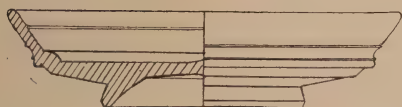
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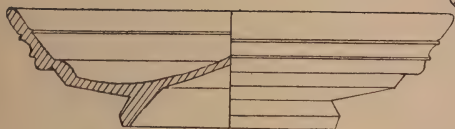
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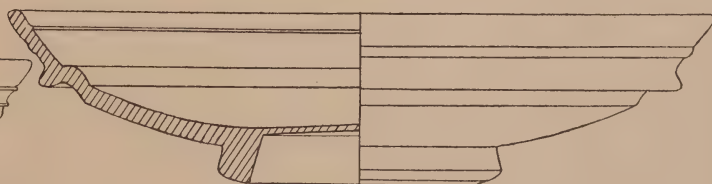
38



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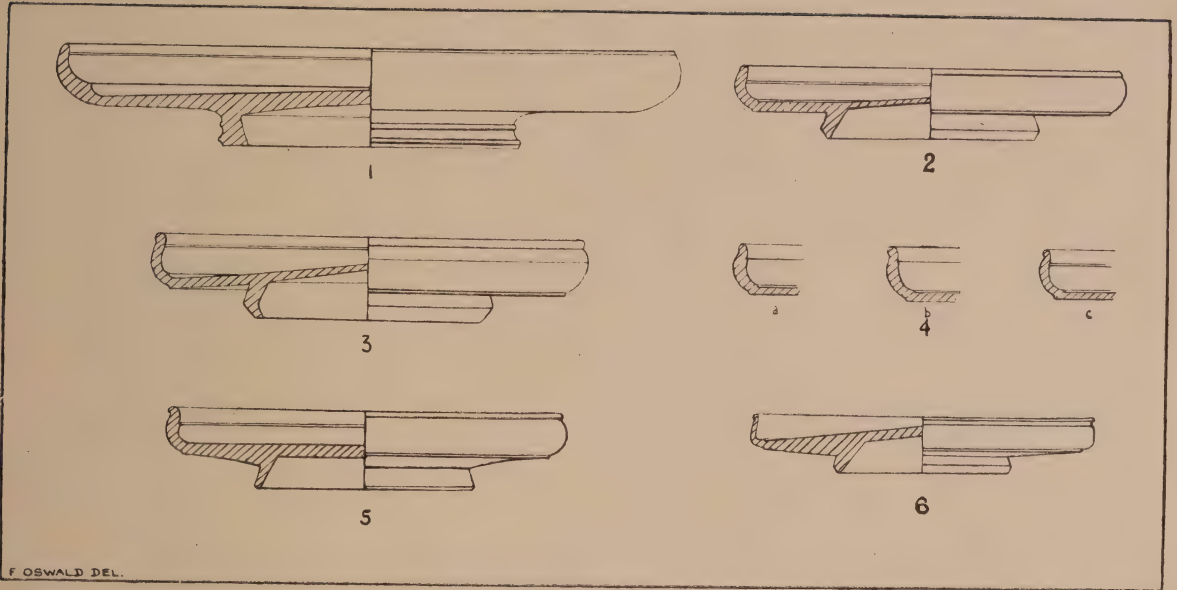
42



43







RITTERLING TYPE I.

1. Loeschcke Type 4 B. Arretine prototype. Haltern. Stamped C. MEMMI HILARI. Augustan. Loeschcke, *Haltern*, Pl. X. 4 B.
2. Ritterling Type I. Hofheim, I. Claudian. Ritterling, *Hofheim*, Pl. XXX. I. I.
3. Mainz. Stamped MACCAR. Tiberio-Claudian. Geissner 2, Fig. 10.
4. Ritterling Type I. Hofheim I. Claudian. Ritterling, *Hofheim*, Abb. 45, 1-3.
5. Aislingen. Claudius or Nero. Knorr, *Aislingen*, Pl. XV. 18.
6. York. Stamped MASCLVS. May, *York*, Pl. III. 14.

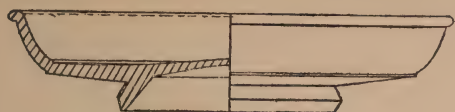
Scale  $\frac{1}{3}$ .

PLATE XLV.

DRAGENDORFF FORMS 18 AND 18/31.

1. Ritterling Type 2 Aa. Hofheim I. Claudian. Ritterling, *Hofheim*, Pl. XXXI.
2. Ritterling Type 2 Ab. Hofheim I. Claudian. *Ibid.* Pl. XXXI.
3. Ritterling Type 2 B. Hofheim I. Claudian. *Ibid.* Pl. XXXI.
- 4-6. Ritterling Type 2. Hofheim I. Claudian. *Ibid.* p. 205.
7. Mainz. Stamped OFI MACCAR. Tiberio-Claudian. Geissner 2, Fig. 11.
8. Margidunum. (*Ad nat.*)
9. Mainz. Stamped COCVS F. Claudian. Geissner 2, Fig. 8.
10. Silchester. Stamped OF LICIN. Claudian. May, *Silchester*, Pl. XXXII. 31.
11. Silchester. *Ibid.* Pl. XXXII. 30.
12. Newstead. Flavian. Curle, *Newstead*, Pl. XXXIX. 1.
13. York. Stamped OF CEN. Flavian. May, *York*, Pl. VI. 10.
14. Form 18/31. Wiesbaden Kastell. Domitian-Trajan. Ritterling, *Das Kastell Wiesbaden*, Pl. XIII. 5.
15. Form 18/31. Gellygaer. Domitian-Trajan. Ward, *Gellygaer*, Pl. XII. 8.
16. Form 18, variant. Newstead. Flavian. Curle, *Newstead*, Pl. XXXIX. 6.
17. Form 18. Aislingen. Stamped PRIMVL PATER. Knorr, *Aislingen*, Pl. XV. 20.
18. Form 18. York. Stamped PATRIC. Flavian. May, *York*, Pl. VI. 11.

Scale  $\frac{1}{3}$ .



1



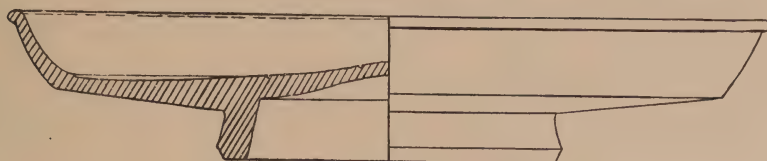
5



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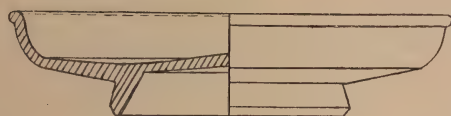
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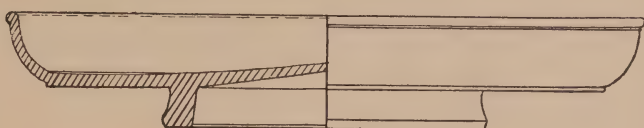
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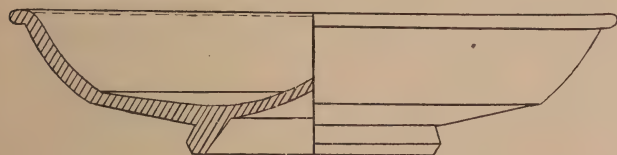
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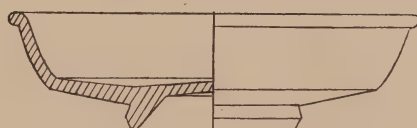
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13



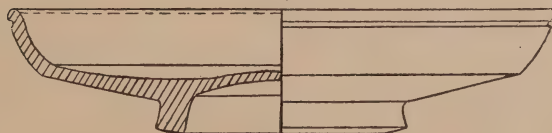
14



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16



17



18



## PLATE XLVI.

### DRAGENDORFF FORMS 18/31 AND 31.

1. Form 18/31. Gellygaer. Domitian-Hadrian. After Ward.
2. Form 18/31. York. Stamped SECUNDINI M. Lezoux ware. Domitian-Hadrian. May, *York*, Pl. VI. 12.
3. Form 18/31. Wiesbaden Kastell. Domitian-Hadrian. Ritterling, *Das Kastell Wiesbaden*, Pl. XIII. 5.
4. Ludowici Tq. Mainz. Stamped BONOXS F. Lezoux ware. Trajan-Hadrian. Geissner 2, Fig. 17.
5. Ludowici Tq/Sb. Mainz. Stamped TOCCA F. East Gaulish ware. Hadrian-Pius. *Ibid.* Fig. 23.
6. Ludowici Sb. Silchester. Stamped ALBVCI OFF. Lezoux ware. Hadrian-Antonine. May, *Silchester*, Pl. XXXII. 32.
7. Form 18/31. Trèves. Commencement II. Century. Fölzer, Pl. XI. 3.
8. Form 18/31. Mainz. Stamped LVCIVS F. Rheinzabern ware. Hadrian-Antonine. Geissner 2, Fig. 12.
9. Ludowici Tq. Rheinzabern. Ludowici.
10. Ludowici Tq. Mainz. Stamped MICCI III. Heiligenberg and Rheinzabern potter. Hadrian-Antonine. Geissner 2, Fig. 19.
11. Ludowici Tq. Newstead II. Ittenweiler and Rheinzabern potter. Antonine. Curle, *Newstead*, Pl. XL. 22.
12. Ludowici Tq. Mainz. Stamped CAPRASIVS F. Rheinzabern ware. Antonine. Geissner 2, Fig. 18.
13. Ludowici Sa. Mainz. Stamped FIRMVS. Heiligenberg and Rheinzabern potter. Trajan-M. Aurelius. *Ibid.* Fig. 20.
14. Ludowici Sa. Rheinzabern. Stamped VENICARVS F. Heiligenberg and Rheinzabern potter. Antonine. Ludowici.
15. Ludowici Sa/Sb. Mainz. Stamped MARTIVS F. Ittenweiler and Rheinzabern potter. Antonine. Geissner 2, Fig. 24.
16. Ludowici Tq. Niederbieber. Stamped NATALIS F. Rheinzabern ware. Aurelius-Commodus. Oelmann, *Niederbieber*, Pl. I. 1 A.

Scale  $\frac{1}{3}$ .

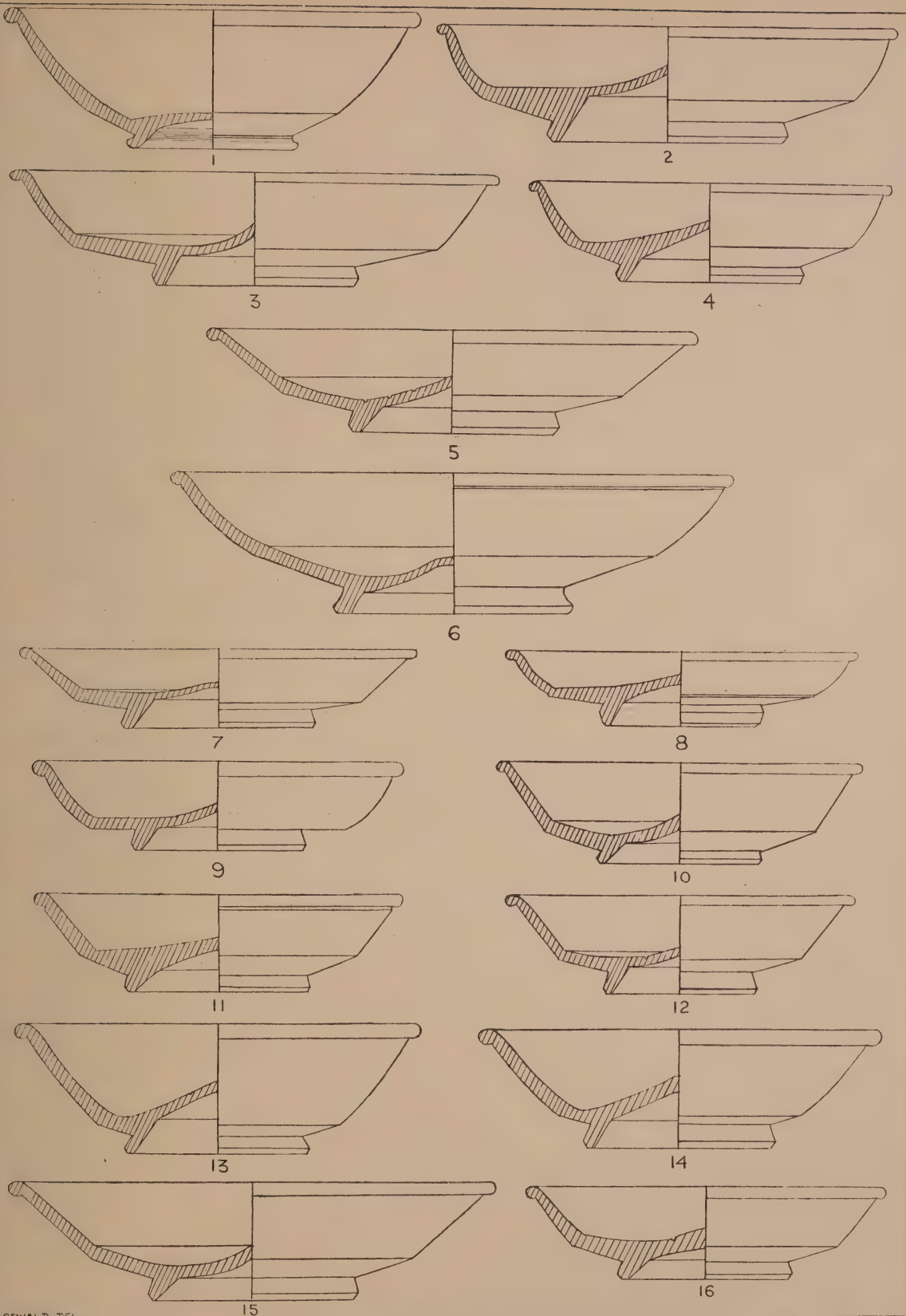


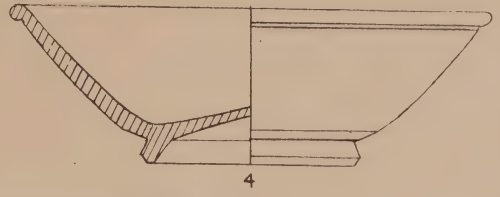
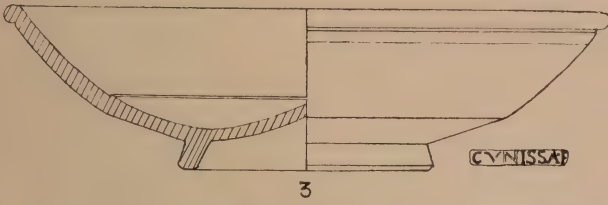
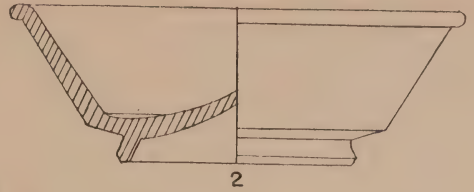
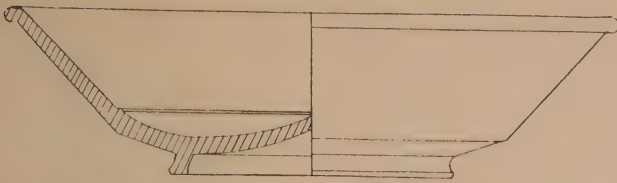
PLATE XLVII.

DRAGENDORFF FORM 31 (*continued*).

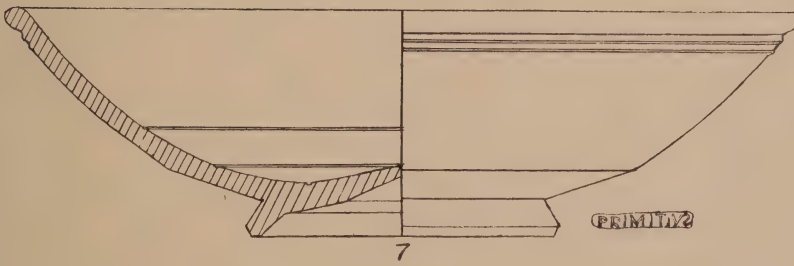
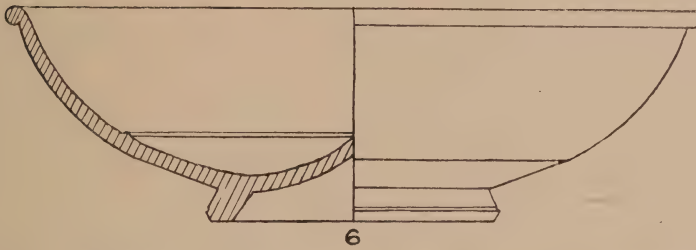
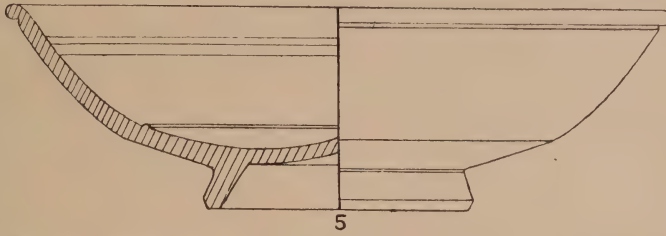
1. Ludowici Sa/Sb. Pudding Pan Rock 10. Stamped MACRIANI. Lezoux ware. R. Smith, *Pan Rock*, 10.
2. Ludowici Sa. Pudding Pan Rock 11. Stamped ATILIANI. Lezoux ware. *Ibid.* 11.
3. Ludowici Sb. Margidunum. Stamped CVNISSA F. Rheinzabern ware. Antonine. Ludowici, *Rheinzabern*.
4. Ludowici Sa. Niederbieber. Stamped FLORENTINVS F. Rheinzabern ware. Second half of Second Century. Oelmann, *Niederbieber*, Pl. I. 1 B.
5. Ludowici Sb. Rheinzabern. Stamped CONATIVS F. Antonine. Ludowici, *op. cit.*
6. Ludowici Sb. Pudding Pan Rock 9. Stamped MAINACNI. Lezoux ware. R. Smith, *Pan Rock*, 9.
7. Ludowici Sb. Niederbieber. Stamped PRIMITIVS. Rheinzabern ware. Second half of Second Century. Oelmann, *Niederbieber*, Pl. I. 1 C.

Scale  $\frac{1}{3}$ .

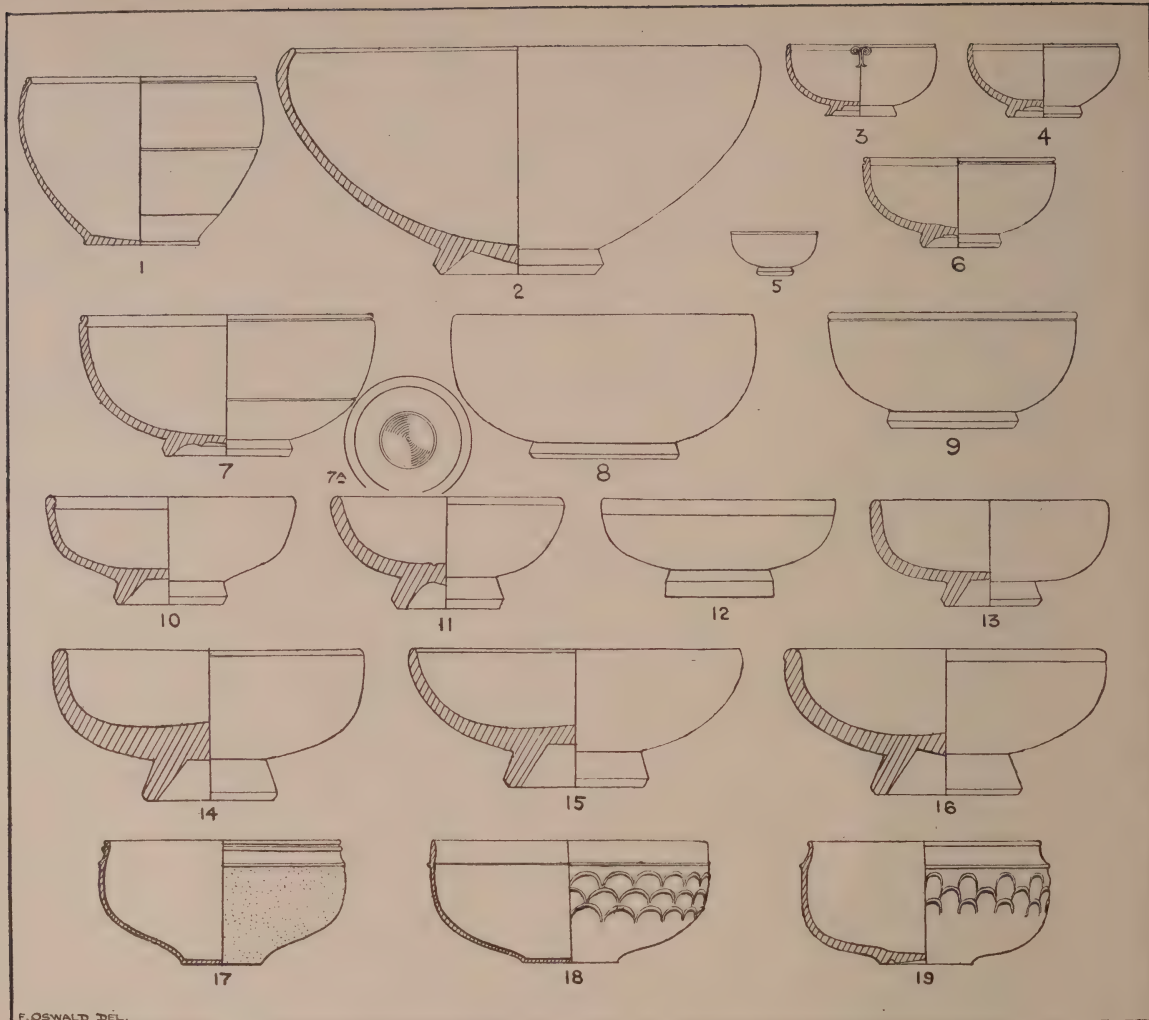




CYNISSE



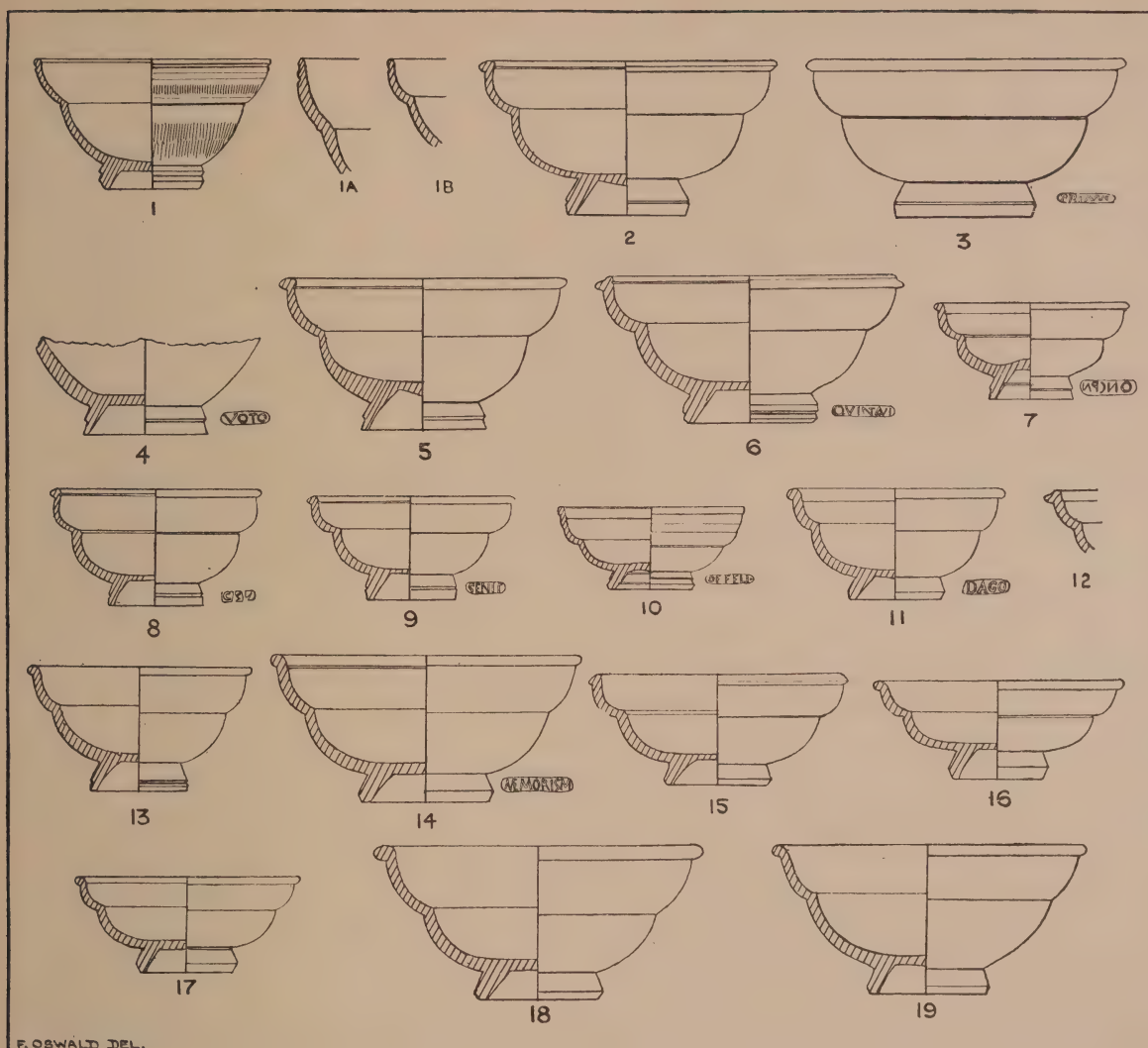
PRIMITIV



RITTERLING TYPE 8 AND DRAGENDORFF FORM 40.

1. Loeschke Type 13. Arretine (sometimes rouletted). Haltern. Augustan. Loeschke, *Haltern*, Pl. X. 13.
2. Loeschke Type 6. Arretine. Haltern. Base restored by Loeschke. Augustan. *Ibid.* Abb. 3.
3. Arretine prototype of Ritterling Type 8. British Museum A 1689. (*Ad nat.*)
4. Ritterling Type 8. Mainz. Stamped NALIS. Claudian. Geissner 2, Fig. 14.
5. Ritterling Type 8. Strasbourg. Henning, *Strasbourg*, Pl. XVII. 24.
6. Ritterling Type 8. Aislingen. Stamped AQVIT. Claudian. Knorr, *Aislingen*, Pl. XVI. 7.
7. Ritterling Type 8. Hofheim I. Claudian. Ritterling, *Hofheim*, Pl. XXXI. 8.
- 7A. Base of Fig. 7.
8. Ritterling Type 8. Strasbourg. Stamped TANDA. Claudian. Henning, *Strasbourg*, Pl. XVII. 23.
9. Ritterling Type 8. Strasbourg. Claudian. *Ibid.* Pl. XVII. 25.
10. Dragendorff Form 40. Trèves. Fölzer, Pl. XI. 15.
11. Dragendorff Form 40. Rheinzabern. Stamped AMANDVS FE. Antonine. Ludowici Type 5a.
12. Dragendorff Form 40. Strasbourg. Second Century. Henning, *Strasbourg*, Pl. XVII. 26.
13. Dragendorff Form 40. Pfünz. Trajan-Hadrian. Winkelmann, O.R.L. *Pfünz*, Pl. VII. 5.
14. Dragendorff Form 40. Trèves. Fölzer, Pl. XI. 10.
15. Dragendorff Form 40. Mainz. Stamped LVCINVS F. Rheinzabern ware. Geissner 2, Fig. 13.
16. Dragendorff Form 40. Niederbieber. Second half Second Century. Oelmann, *Niederbieber*, Pl. I. 10.
- 17, 18, 19. Varnished bowls. Ritterling Types 22 Aa, 22 Ad and 22Bd respectively. Hofheim. Claudian. Ritterling, *Hofheim*, Pl. XXXII.

Scale  $\frac{1}{2}$ .



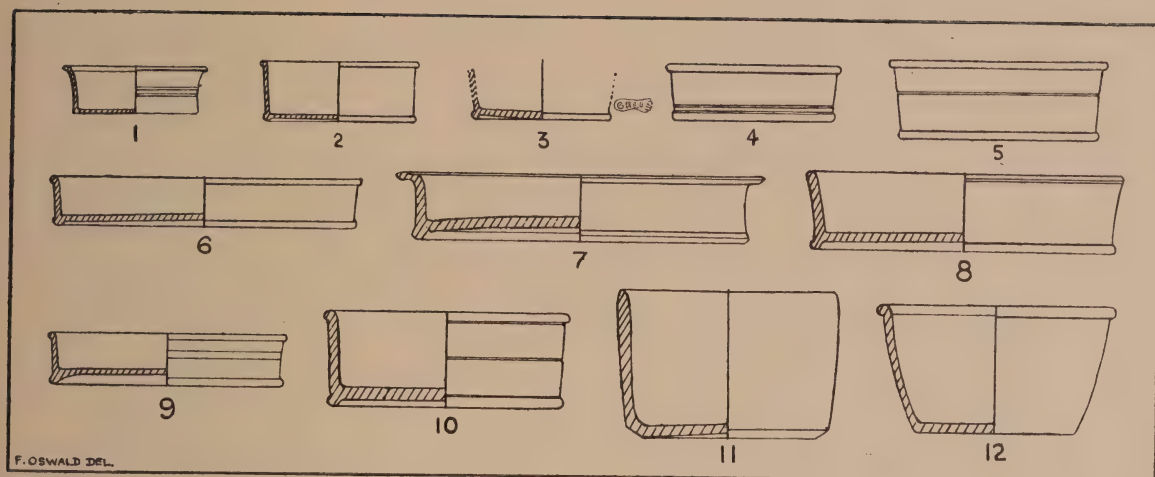
## DRAGENDORFF FORM 27.

- 1, 1A and 1B. Loescheke Type 11. Haltern. Augustan. Loescheke, *Haltern*, Pl. X. 11.
2. Ritterling Type 7. Hofheim. Claudian. Stamped HABITVS, AQVITANI, BASSI, OF BASSI, CEL[ERIS]M, COM, OF CREST, FELIX, LICINVS F, OFI MACCA, MACCARI, OF PRM, QVINTANI, QVINT, VAPVSO. Ritterling, *Hofheim*, Pl. XXXI. 7.
3. Xanten. Stamped PRIMVS. Claudian grave. Steiner, *Xanten*, Pl. I. 1.
4. Xanten. Stamped voto. Claudian. *Ibid.* Abb. 24, 3.
5. Mainz. Stamped FIRMO. Claudian. Geissner 2, Fig. 7.
6. Aislingen. Stamped QVINTANI. Claudian. Knorr, *Aislingen*, Pl. XVI. 17.
7. Aislingen. Stamped ONCPA. Claudian. *Ibid.* Pl. XVI. 18.
8. Aislingen. Stamped CEN (?). Claudian. *Ibid.* Pl. XVI. 20.
9. Aislingen. Stamped SENIS. Claudian. *Ibid.* Pl. XVI. 19.
10. Margidunum. Stamped OF FELI. Claudian-Neronian. (*Ad nat.*)
11. Newstead I. Flavian. Curle, *Newstead*, Pl. XXXIX. 10.
12. Margidunum. (*Ad nat.*)
13. Ludowici Type 3b. Rheinzabern grave. Stamped svlpi. Flavian. Ludowici, *Rheinzabern*.
14. Silchester. Stamped MEMORIS M. Nero-Vespasian. May, *Silchester*, Pl. XXXI. 18.
15. Pfünz. Winkelmann, O.R.L. *Pfünz*, Pl. VI. 6.
16. Wiesbaden Kastell. Domitian-Trajan. Ritterling, *Kastell Wiesbaden*, Pl. XIII. 8.
17. Gellygaer. Domitian-Trajan. Ward, *Gellygaer*, Pl. XII. 6.
18. York. Stamped BIGA FEC. Domitian-Trajan. May, *York*, Pl. V. 4.
19. Pfünz. Winkelmann, O.R.L. *Pfünz*, Pl. VI. 7.

Scale  $\frac{1}{2}$ .







DRAGENDORFF FORMS 22 AND 23.

1. Dragendorff Form 4. Arretine.
2. Ritterling Type II B. Hofheim I. Claudian. Ritterling, *Hofheim*, Pl. XXXI. II B.
3. Arretine fragment. Aislingen. Tiberian. Knorr, *Aislingen*, Pl. XVI. 15.
4. Strasbourg. Henning, *Strasbourg*, Pl. XVIII. 14.
5. Strasbourg. *Ibid.* Pl. XVIII. 16.
6. Ritterling Type II A. Hofheim I. Claudian. Ritterling, *Hofheim*, Pl. XXXI. II A.
7. Aislingen. Claudian. Knorr, *Aislingen*, Pl. XV. 21.
8. Silchester. May, *Silchester*, Pl. XXXI. 17.
9. York. May, *York*, Pl. VI. 17.
10. Newstead I. Curle, *Newstead*, Pl. XXXIX. 12.
11. Niederbieber. Oelmann, *Niederbieber*, Pl. I. 13.
12. Ludowici Type Na. Rheinabern. Ludowici, *Rheinabern*.

Scale  $\frac{1}{3}$ .

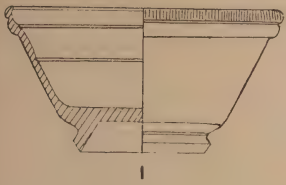
## PLATE LI.

### DRAGENDORFF FORM 33.

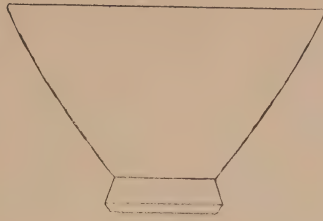
1. Loeschcke Type 10 A. Haltern. Augustan. Loeschcke, *Haltern*, Pl. X. 10 A.
2. Mont Beuvray. Augustan non-Sigillata. Bulliot, *Album*, Pl. XXXI. 23.
3. Ritterling Type 10. Hofheim I. Claudian. Ritterling, *Hofheim*, Pl. XXXI. 10.
4. Mainz. Stamped  $\Lambda O I I I$ . Claudian (?). Geissner 2, Fig. 10.
5. Strasbourg. Claudian (?). Henning, *Strasbourg*, Pl. XVII. 3.
6. Xanten. Claudian grave group 9. Stamped  $A L I M$ . Steiner, *Xanten*, Pl. I. 15.
7. Silchester. Stamped  $O F P R I M I$ . May, *Silchester*, Pl. XXXI. 19.
8. Gellygaer. Domitian-Hadrian. Ward, *Gellygaer*, Pl. XII. 4.
9. Strasbourg. Stamped  $C O S I \Delta I$ . Domitian. Henning, *op. cit.* Pl. XVII. 4.
10. Margidunum. Stamped  $T A L V S S A$ . Domitian-Trajan. (*Ad nat.*)
11. Silchester. Stamped  $Q V I N T I M$  [=Pan Rock Form 13]. Lezoux. Mid Second Century. May, *Silchester*, Pl. XXXI. 20.
12. Margidunum (outer ditch). Stamped  $P R I V A T I M$ . Trajan-Hadrian. Lezoux ware. (*Ad nat.*)
13. Newstead II. Antonine. Curle, *Newstead*, Pl. XL. 18.
14. Rheinzabern, Ludowici Type Ba. Stamped  $M A R T I N V S F$ . Mid Second Century. Ludowici, *Rheinzabern*.
15. York. (Third-Fourth Century.) May, *York*, Pl. V. 6.
16. Pudding Pan Rock Form 12. Stamped  $A T I L I A N I$ . Lezoux ware. Mid Second Century. R. Smith, *Pan Rock*, 12.
17. Niederbieber. Stamped  $F L O R V S$ . Rheinzabern ware. Late Second Century. Oelmann, *Niederbieber*, Pl. I. 9.
18. Strasbourg. Skeleton grave. Fourth Century. Henning, *Strasbourg*, Pl. XVII. 5.

Scale  $\frac{1}{3}$ , excepting Fig. 2, which is  $\frac{1}{4}$ .

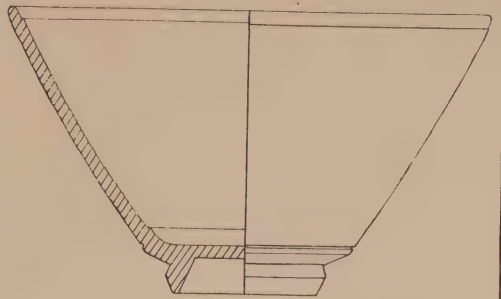




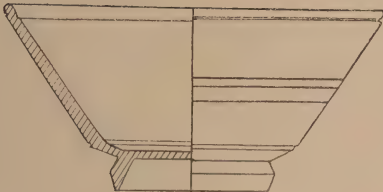
1



2



3



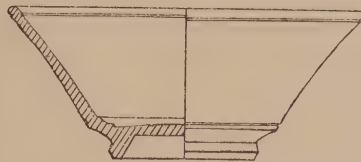
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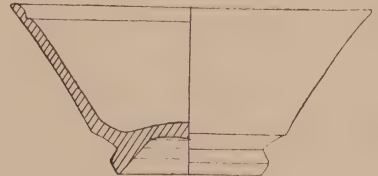
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6



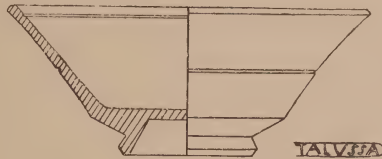
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8

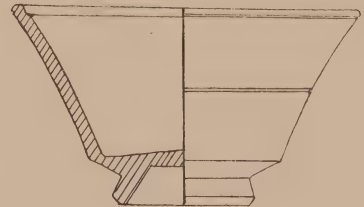


9

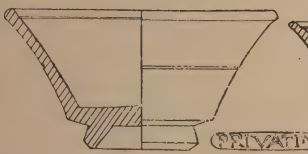


10

TALVEA

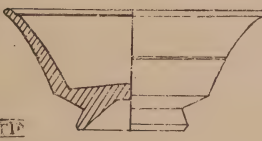


11



12

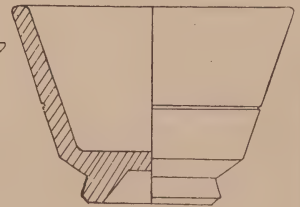
PRIVATE



13



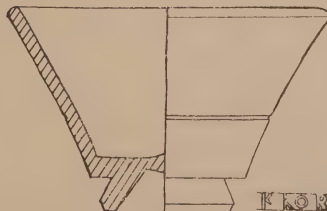
14



15



16



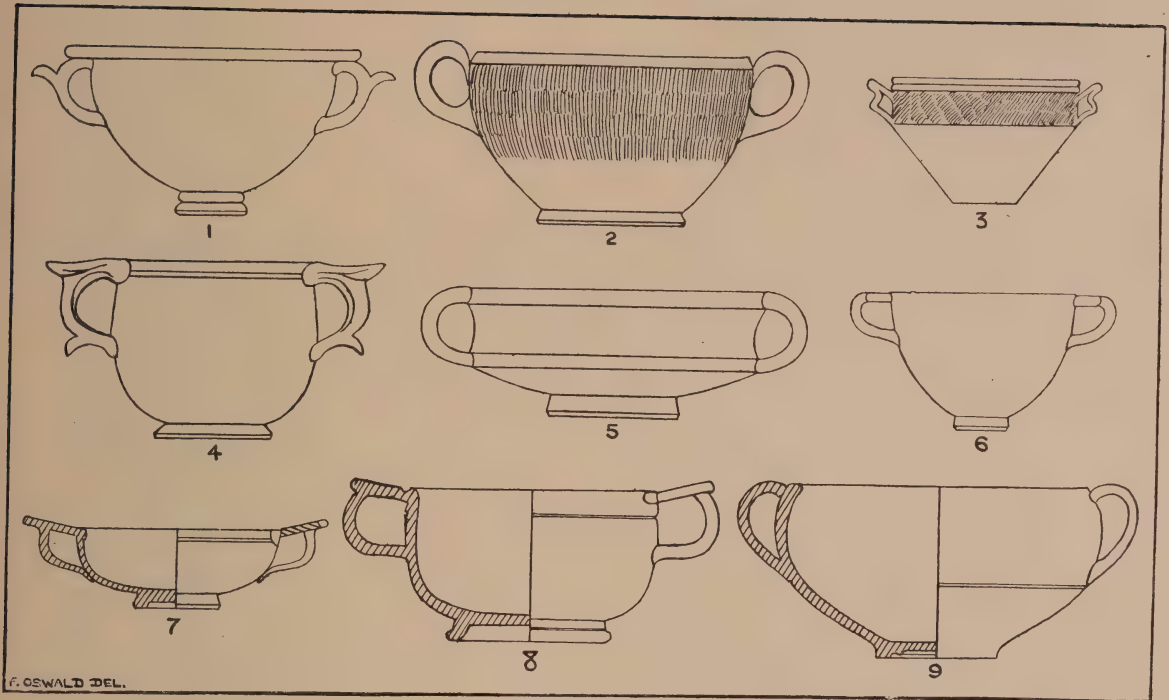
17

FLORVIA



18





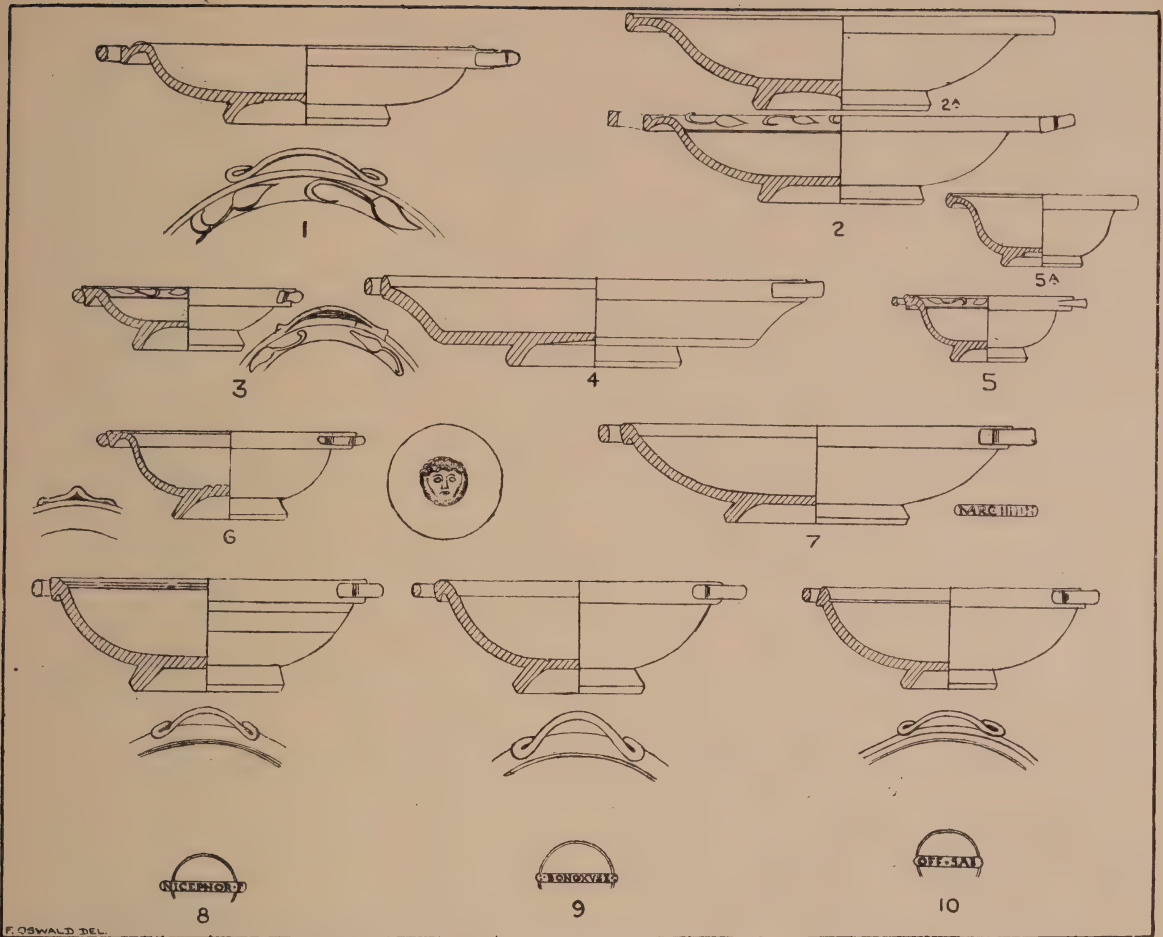
DRAGENDORFF FORM 34 AND VARIANTS.

1. Black Etruscan ware. Second Century B.C. Florence. Hölder, *Formen d. röm. Thongefässe*, Pl. XX. 15.
2. Loeschcke Type 14. Early Gaulish Sigillata. Tiberian. Loeschcke, *Haltern*, Abb. 5, 2.
3. Sigillata cup. Naples. Hölder, *op. cit.* Pl. XX. 6.
4. Polished clay. Viterbo. Loeschcke, *Haltern*, Abb. 5, 3.
5. Sigillata bowl. Rome, Kircheriano Museum. Hölder, *op. cit.* Pl. XVIII. 1.
6. Sigillata cup. Florence. Hölder, *op. cit.* Pl. XX. 1.
7. Dragendorff Form 34. Dragendorff, *Bonn. Jahrb.* xcvi.
8. Newstead II. Antonine Sigillata. Curle, *Newstead*, Pl. XI. 13.
9. Sigillata bowl. York. May, *York*, Pl. V. 8.

Scale  $\frac{1}{8}$ .







## DRAGENDORFF FORM 42 AND VARIANTS.

1. Leicester. Leicester Museum. (*Ad nat.*)
2. Strasbourg. Henning, *Strasbourg*, Pl. XVIII. 18.
- 2A. Rottweil. Hölder, *Die röm. Thongefässen in Rottweil*, Pl. II. 1.
3. Colchester. Joslin Coll. (*Ad nat.*)
4. Colchester. General Coll. 167 P.C. (*Ad nat.*)
5. Rottweil. Hölder, *op. cit.* Pl. IX. 3.
- 5A. Ritterling Type 14. Hofheim. Ritterling, *Hofheim*, Pl. XXXI. 14.
6. London, Guildhall Museum. Catalogue, Pl. XLV. 1, and Pl. XCIX. 2.
7. Colchester. Joslin Coll. 163, Group 128. Stamped MARCELLIN (?).
8. Corbridge. Stamped NICEPHOR · F. Corbridge Report V. Fig. 9.
9. Colchester. General Coll. 1858-09. Stamped BONOXVS E.
10. London, Bethnal Green Museum. Stamped OFF SAB. (*Ad nat.*)

Scale  $\frac{1}{3}$ .

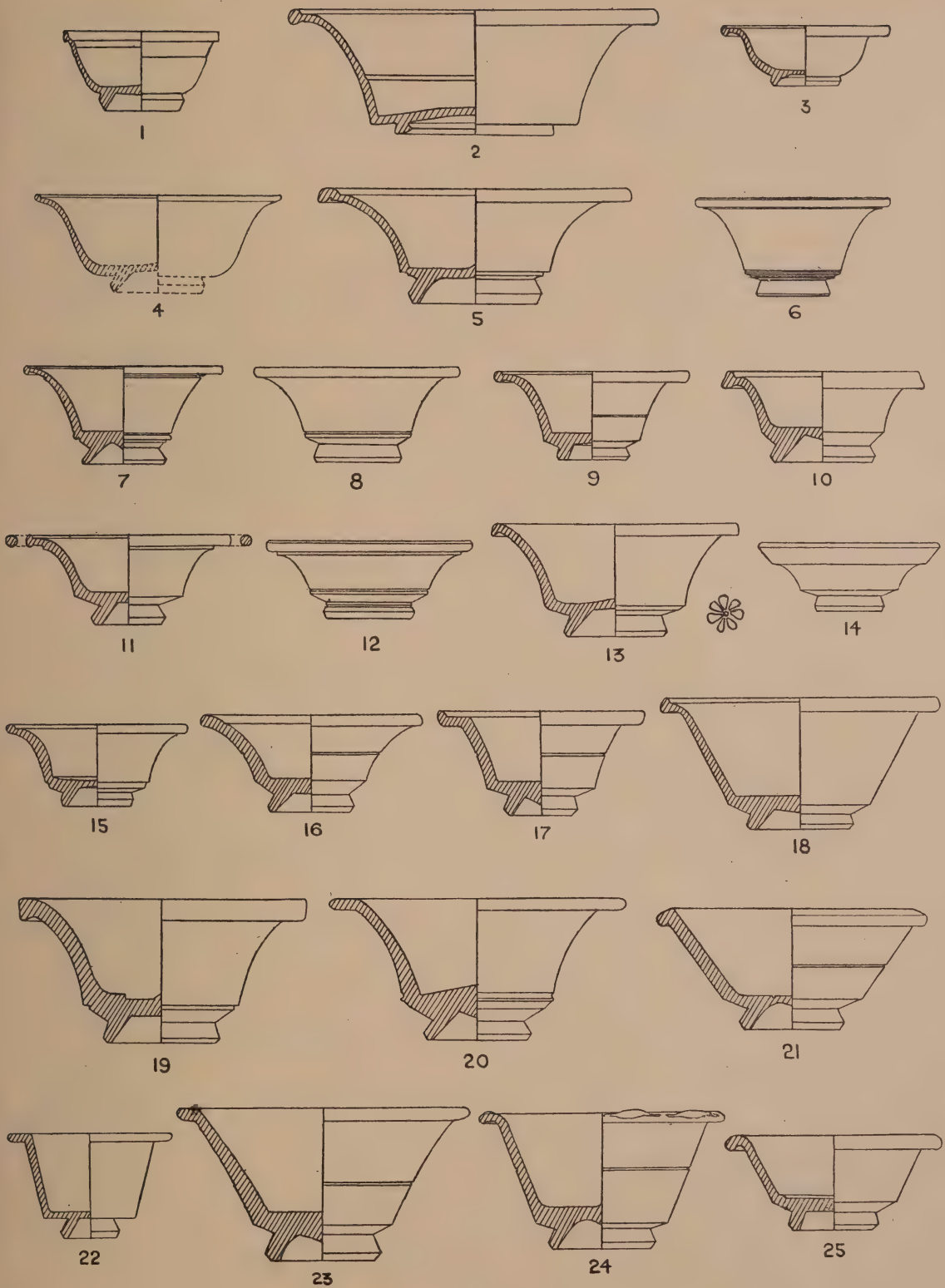
# PLATE LV.

## DRAGENDORFF FORM 46.

1. Loeschcke Type 7 A. Haltern. Augustan. Loeschcke, *Haltern*, Pl. X. 7 A.
2. Loeschcke Type 77. Belgic. Haltern. Augustan. *Ibid.* Pl. XIV. 77.
3. Ritterling Type 14. Hofheim II. Ritterling, *Hofheim*, Pl. XXXI. 14.
4. Gellygaer. Domitian-Trajan. Ward, *Gellygaer*, Pl. XII. 7.
5. Wiesbaden Kastell. Domitian-Trajan. Ritterling, *Das Kastell Wiesbaden*, Pl. XIII. 4.
6. Trèves, Grave group 971. Trajan-Hadrian. Provinzial Museum, Trèves.
7. Trèves pottery. Trajan-Hadrian (?). Fölzer, Pl. XI. 14.
8. Strasbourg. Trajan-Hadrian (?). Henning, *Strasbourg*, Pl. XVII. 14.
9. Heiligenberg pottery. Trajan-Hadrian. Forrer, Pl. XIII. 21.
10. Pfünz. Trajan-Hadrian. Winkelmann, O.R.L. *Pfünz*, Pl. VII. 9.
11. Ludowici Type Oc. Rheinzabern. Antonine. Ludowici, *Rheinzabern*.
12. Strasbourg. Trajan. Henning, *op. cit.* Pl. XVII. 15.
13. Silchester. Rosette stamp. Antonine (?). May, *Silchester*, Pl. XXXI. 21.
14. Strasbourg. Trajan. Henning, *op. cit.* Pl. XVII. 20.
15. Silchester. May, *Silchester*, Pl. XXXI. 23.
16. Newstead I. Antonine. Curle, *Newstead*, Pl. XI. 16.
17. Ludowici Type Bd. Rheinzabern. Antonine. Ludowici, *op. cit.*
18. Niederbieber. "A survival" (?). C. 170-180 A.D. Oelmann, *Niederbieber*, Pl. I. 7.
19. York. Antonine. May, *York*, Pl. V. 5.
20. Ludowici Type Bc. Rheinzabern. Antonine. Ludowici, *op. cit.*
21. Mainz. Stamped MARINVS. Hadrian-Antonine. Geissner 2, Fig. 11.
22. Heiligenberg pottery. Trajan-Hadrian. Forrer, Pl. XIII. 20.
23. Ludowici Type Bb. Rheinzabern. Stamped IVLIANVS. Antonine. Ludowici, *op. cit.*
24. Niederbieber. End Second Century. Oelmann, *Niederbieber*, Pl. I. 8 B.
25. Pan Rock Type 8. Middle and latter half of Second Century. R. Smith, *Pan Rock*, 8.

Scale  $\frac{1}{2}$ .



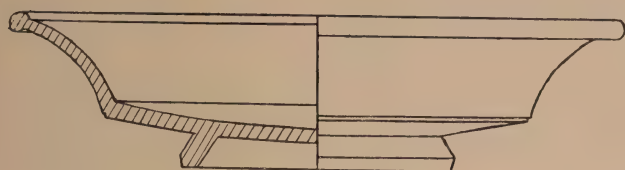


## PLATE LVI.

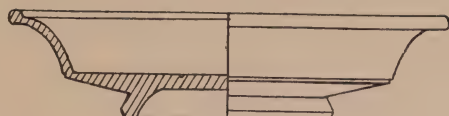
### CURLE TYPE 15.

1. Curle Type 15. Newstead II. Antonine. Curle, *Newstead*, Pl. XL. 15.
2. Trèves grave group 312 A. Antonine.
3. Margidunum. Antonine. Infilling of Ditch 1. (*Ad nat.*)
4. Heiligenberg. Hadrian. Forrer, Pl. XIII. 5.
5. Ludowici Type Tc. Rheinzabern. Stamped AVETEDO F. Ludowici, *Rheinzabern*.
- 6 and 7. Pfünz. Winkelmann, O.R.L. *Pfünz*, No. 7 A.
8. Silchester. May, *Silchester*, Pl. XXXII. 35.
9. York. Antonine. May, *York*, Pl. VI. 15.
10. Ludowici Type Tv. Rheinzabern. Antonine. Ludowici, *Rheinzabern*.
11. Pfünz. Antonine. Winkelmann, O.R.L. *Pfünz*, No. 7.
12. Ludowici Type Tt. Rheinzabern. Antonine. Ludowici, *Rheinzabern*.
13. Niederbieber. End Second Century. Oelmann, *Niederbieber*, Pl. I. 2.
14. Pudding Pan Rock, 7. R. Smith, *Pan Rock*, 7.
15. Ludowici Type Tz. Hadrian. Rheinzabern. Ludowici, *Rheinzabern*.

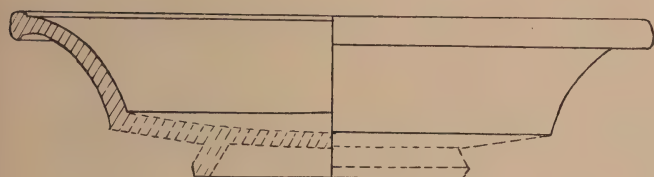
Scale  $\frac{1}{3}$ .



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2



3



4



5



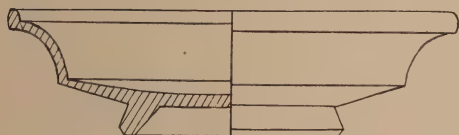
6



8



9



10



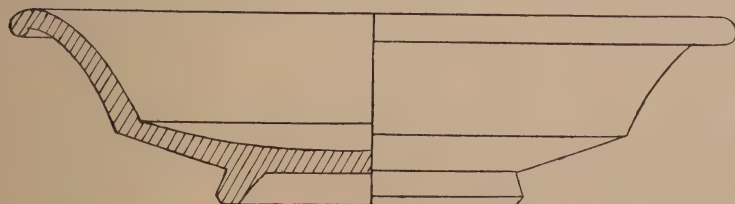
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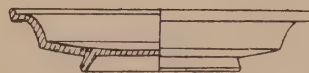
12



13



14



15



PLATE LVII.

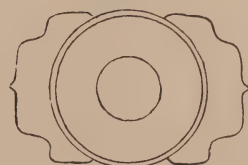
DRAGENDORFF FORM 39 AND VARIANTS.

1. Tray. Lezoux ware, First-Second Century. British Museum. Walters, *C.R.P.* M 108, Pl. XIV.
2. Ludowici Type Oa. Rheinzabern. Stamped CATVLLVS E. Mid Second Century. Ludowici, *Rheinzabern*.
3. York. May, *York*, Pl. VII. 3 A.
4. Handle of tray. Lezoux. Déchelette II. Pl. VII. 7.
5. Dragendorff Form 39.
6. Rottweil. Hölder, *Die röm. Thongefässe der Altertumssammlung in Rottweil*, Pl. IX. 7.

Scale  $\frac{1}{3}$ .



1



3



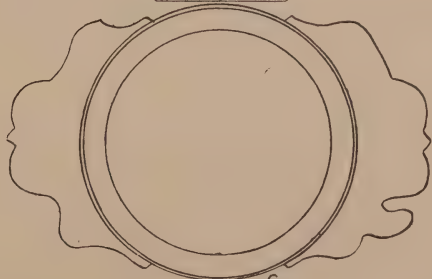
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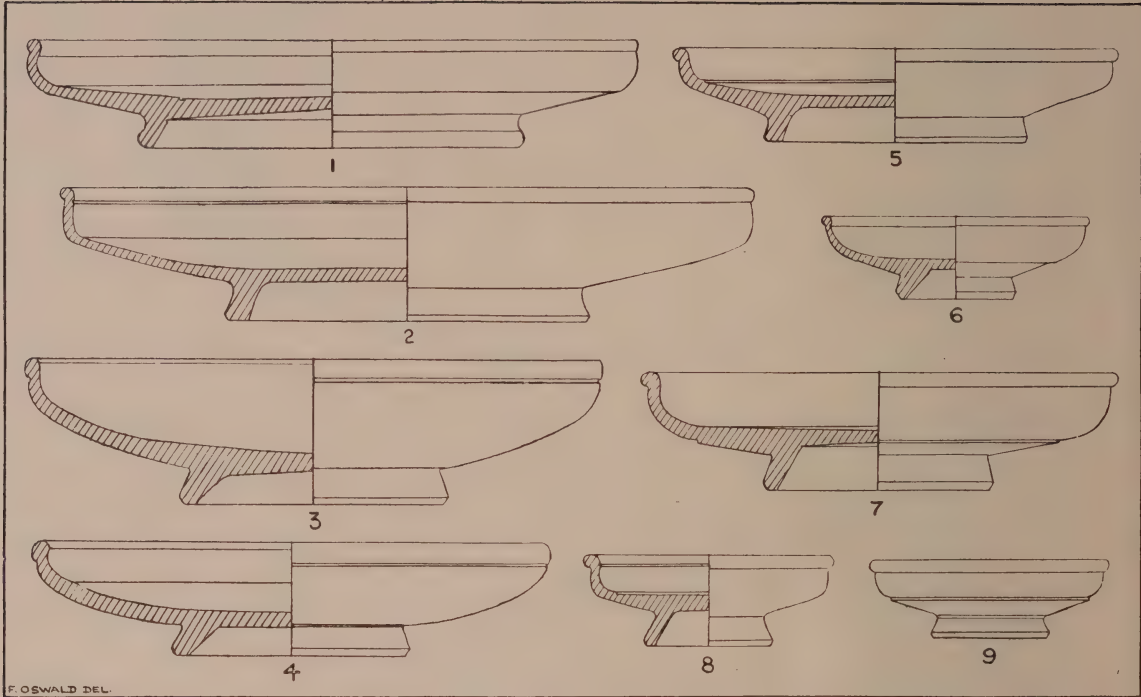
4



5



6

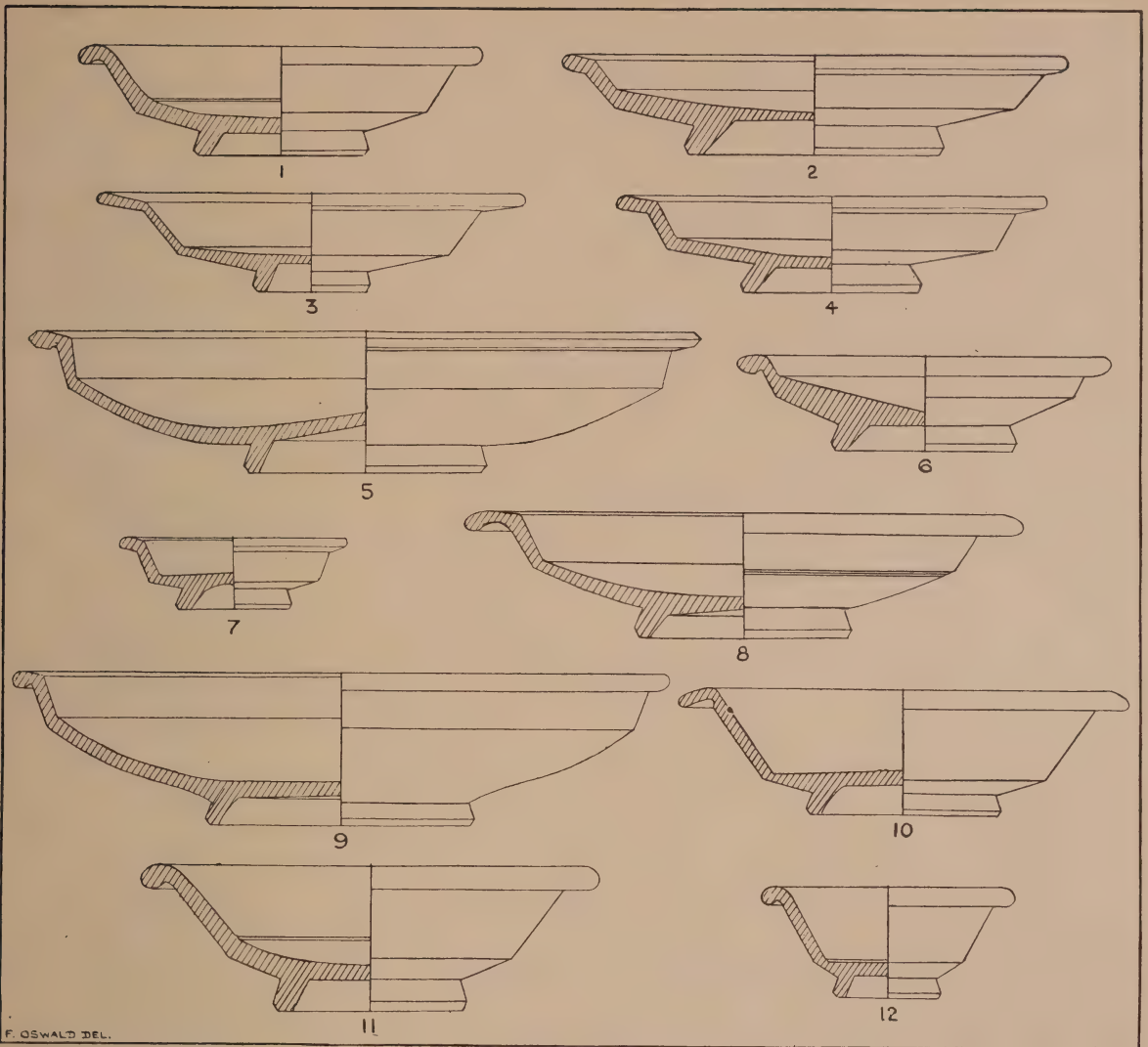


WALTERS FORMS 79 AND 80; LUDOWICI TYPES Th AND Tl.

1. Form 79. Silchester. Stamped REGALIS F. May, *Silchester*, Pl. XXXII. 28.
2. Pudding Pan Rock, Type 1. Stamped BELSA and SEVERIANVS. R. Smith, *Pan Rock*, 1.
3. Niederbieber. Stamped ATILIDO F. Oelmann, *Niederbieber*, Pl. I. 5 B.
4. Ludowici Type Th. Stamped STABILIS. Rheinzabern ware. Ludowici, *Rheinzabern*.
5. Pudding Pan Rock Type 2. Stamped ATILIANI M. R. Smith, *Pan Rock*, 2.
6. Trèves. Fölzer, Pl. XI. 7.
7. Ludowici Type Tl. Stamped CONSTANS F. Ludowici, *Rheinzabern*.
8. Pudding Pan Rock Type 3. Stamped CATIANVS. R. Smith, *Pan Rock*, 3.
9. Xanten. Grave 18. Stamped with seven-rayed rosette. Steiner, *Xanten*, Pl. III. 21.

Scale  $\frac{1}{8}$ .



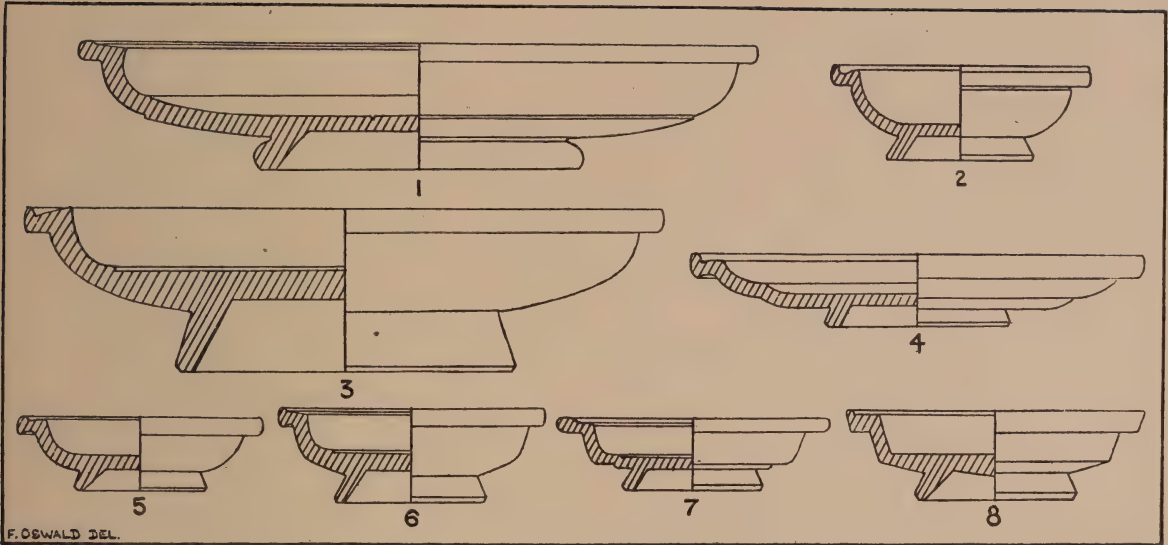


## CURLE TYPE 23 AND LUDOWICI TYPE Tb.

1. Curle Type 23. Newstead II. Antonine period. Curle, *Newstead*, Pl. XL. 23.
2. Ludowici Type Tb. Rheinzabern. Stamped AISTO FII. Hadrian-Antonine. Ludowici, *Rheinzabern*.
3. Pfünz. Trajan-Hadrian. Winkelmann, O.R.L. *Pfünz*, Pl. VII. 6.
4. Mainz. Trajan-Hadrian. Behn, *Sammlung Ludwig Marx*, Abb. 28.
5. Pfünz. Trajan-Hadrian. Winkelmann, *op. cit.* Pl. VII. 5 A.
6. Mainz. Stamped RESTVTVS F. Geissner 2, No. 15.
7. Mainz. Stamped VENICARVS. *Ibid.* No. 12.
8. Niederbieber. Stamped IVLIVS FECIT. Oelmann, *Niederbieber*, Pl. I. 3.
9. Mainz. Stamped LILLVTIVS F. Geissner 2, No. 16.
10. Pudding Pan Rock Type 15. R. Smith, *Pan Rock*, 15.
11. " " " 7. " " " 7.
12. " " " 8. " " " 8.

Scale  $\frac{1}{2}$ .





LUDOWICI TYPES Tg, Tf, Ob AND Tx.

1. Ludowici Tg. Rheinzabern. Stamped CORADVS F. Antonine. Ludowici, *Rheinzabern*.
2. Ludowici Tf'. Rheinzabern. *Ibid*.
3. York. Stamped CLEMENS. May, *York*, Pl. VI.\* 15.
4. Heiligenberg. Forrer, Pl. XIII. 6.
5. Pfünz. Winkelmann, O.R.L. *Pfünz*.
6. Silchester. Stamped ADVOCIS F. Lezoux Potter. Hadrian-Antonine period. May, *Silchester*, Pl. XXXI. 22.
7. Ludowici Ob. Rheinzabern. Ludowici, *Rheinzabern*.
8. Ludowici Tx. Rheinzabern. *Ibid*.

Scale  $\frac{1}{3}$ .

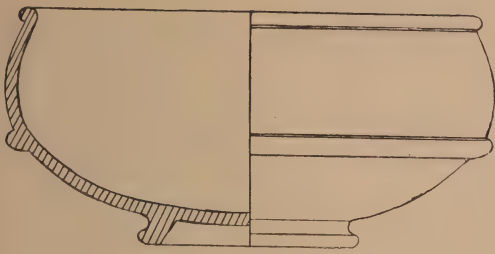


## PLATE LXI.

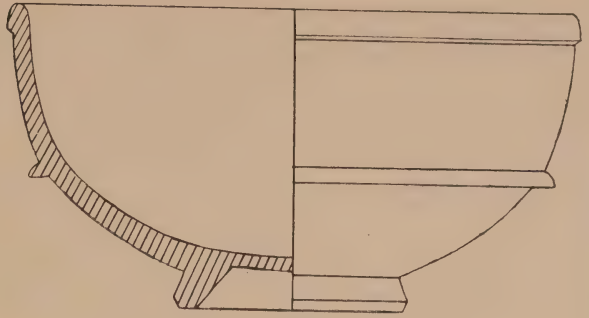
### DRAGENDORFF FORM 44 AND ITS VARIETY WALTERS FORM 81.

1. Newstead II. White paste, dull-red glaze. Antonine. Curle, *Newstead*, Pls. XL. 20 and XLI. 1.
2. Ludowici Type Sl. Rheinzabern. Antonine. Ludowici, *Rheinzabern*.
3. Niederbieber. End Second Century. Oelmann, *Niederbieber*, Pl. I. 18.
4. Pfünz. Trajan-Hadrian. Winkelmann, *Pfünz*, Pl. VII. 4.
5. Pudding Pan Rock. Guildhall Museum. R. Smith, *Pan Rock*.
6. Ludowici Type Sn. Rheinzabern. Antonine. Ludowici, *Rheinzabern*.
7. Silchester. Stamped SVRDI M. May, *Silchester*, Pl. XXXI. 24.
8. York. Stamped GNATIVS. May, *York*, Pl. V. 3.
9. Ludowici Type Sf. Rheinzabern. Antonine. Ludowici, *Rheinzabern*.
10. Ludowici Type Sg. Rheinzabern. Antonine. Ludowici, *Ibid*.
11. Mainz. Brick-red clay, imitation of Sigillata. Third Century (?). Behn, *Sammlung Ludwig Marx*, Fig. 35.

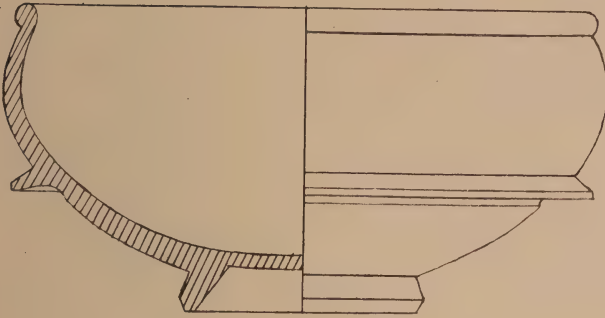
Scale  $\frac{1}{8}$ .



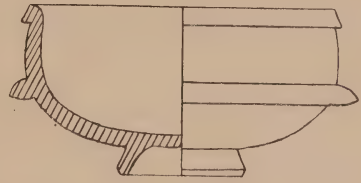
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2



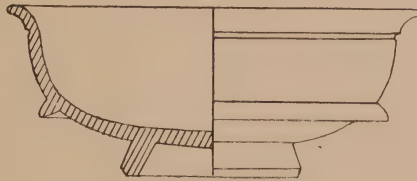
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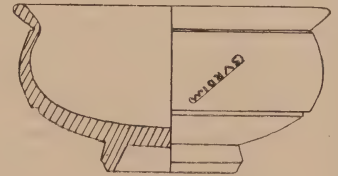
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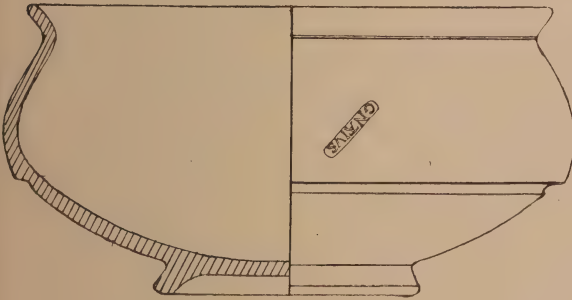
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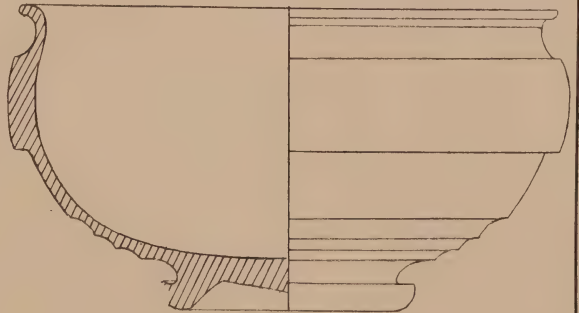
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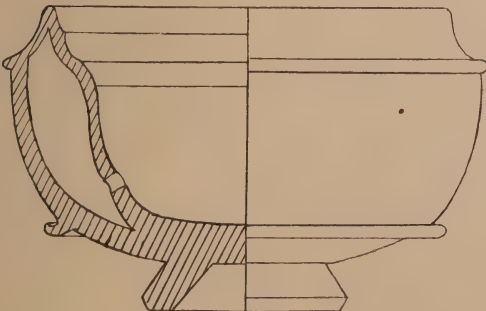
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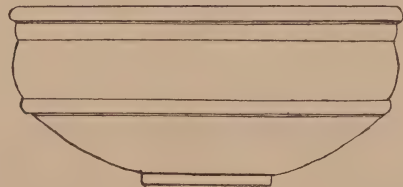
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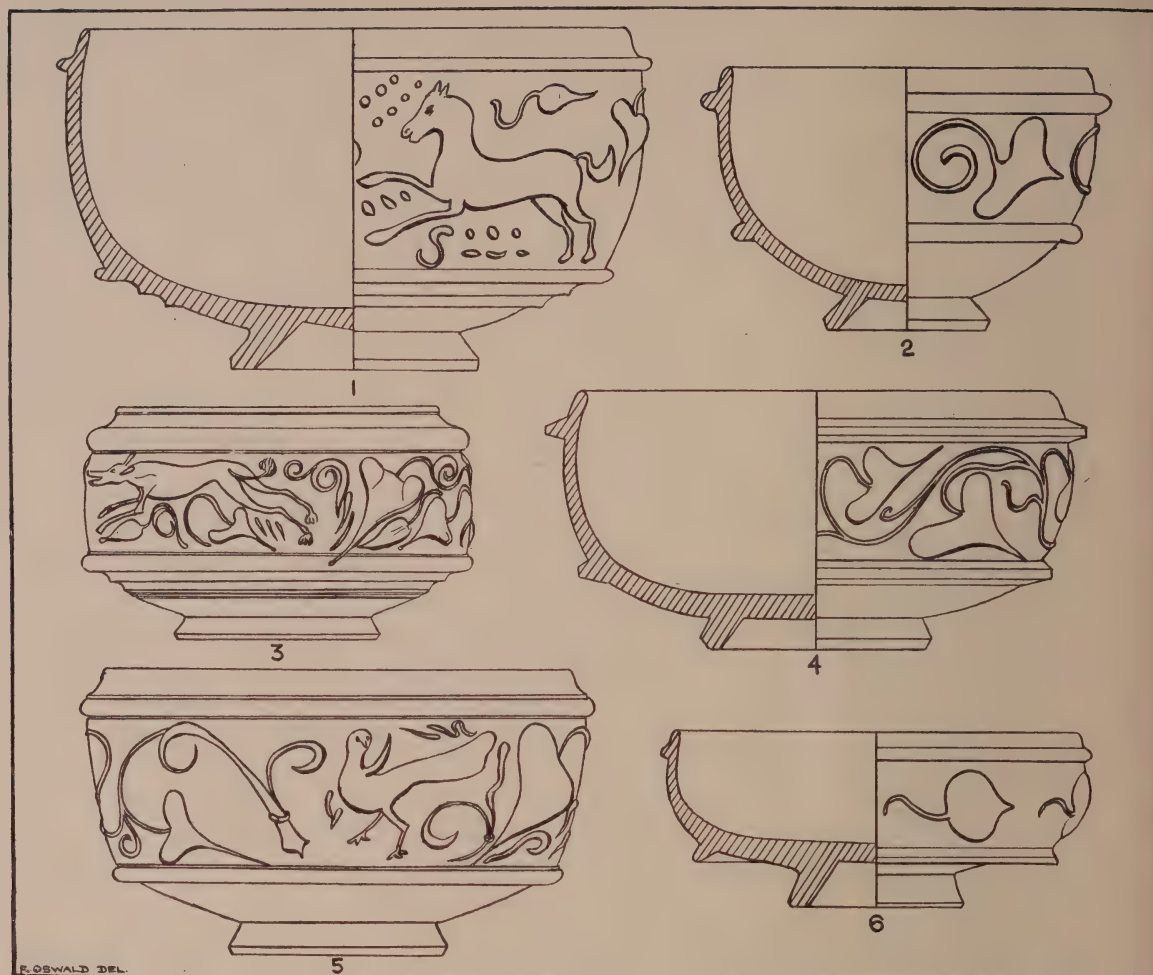
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10



11

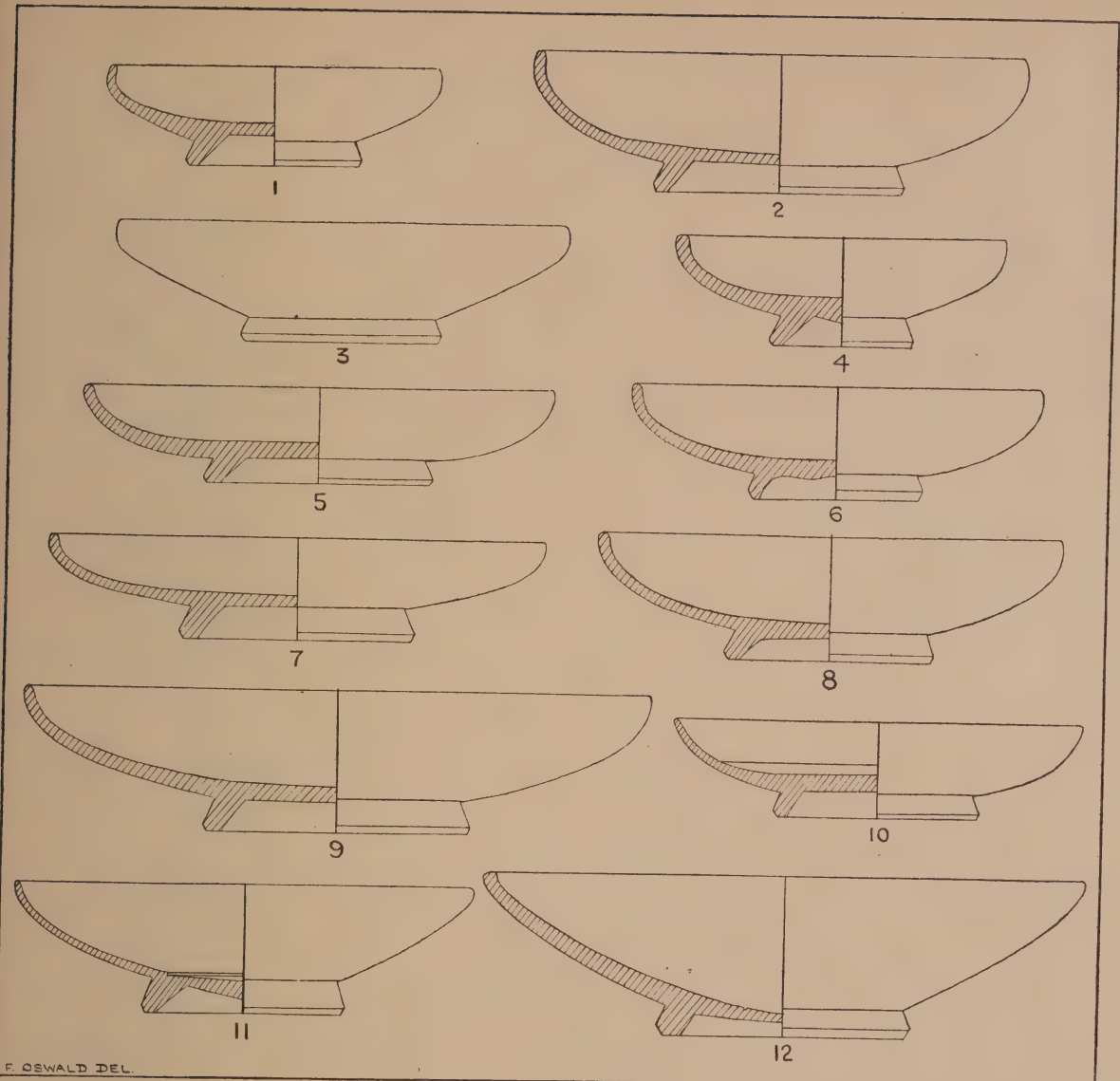


LUDOWICI TYPES SMb, SMc.

1. Ludowici Type SMc. Rheinzabern. Antonine. Ludowici, *Rheinzabern*.
2. Ludowici Type SMb. Rheinzabern. Antonine. *Ibid*.
3. Strasbourg. Henning, *Strasbourg*, Pl. XXV. 5.
4. Niederbieber. End of Second Century. Oelmann, *Niederbieber*, Pl. I. 19.
5. Strasbourg. Henning, *op. cit.* Pl. XXV. 6.
6. Trèves pottery. Second half of Second Century. Fölzer, Pl. XI. 6.

Scale  $\frac{1}{3}$ .

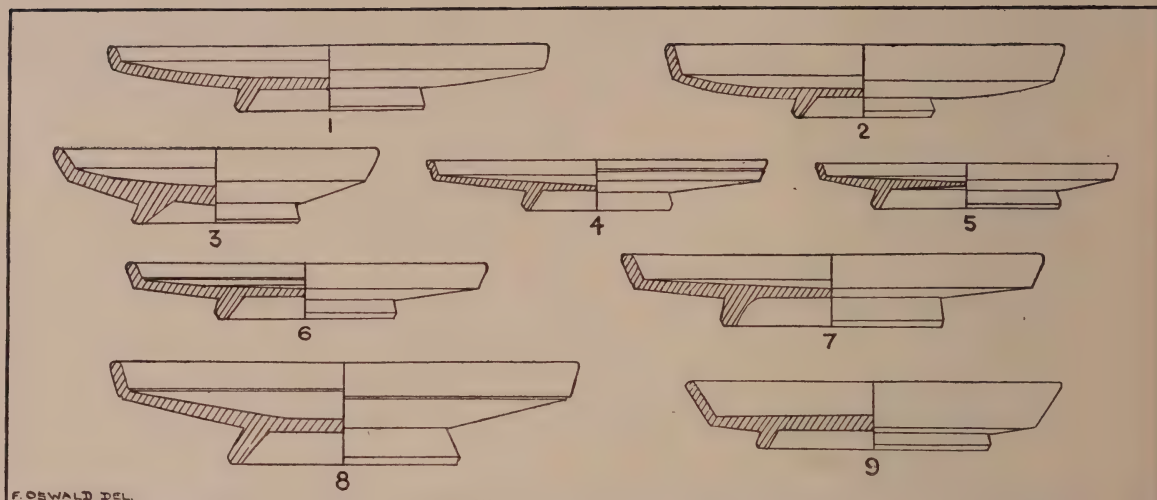




DRAGENDORFF FORM 32 AND VARIANTS.

1. Mainz. Stamped IVNIVS F. Geissner 2, Fig. 14.
2. Pfünz. Winkelmann, *Pfünz*, Pl. VII. 8.
3. Strasbourg. Stamped PASTOR. Henning, *Strasbourg*, Pl. XVIII. 12.
4. Ludowici Tp. Stamped with a wheel with eight spokes. Ludowici, *Rheinzabern*.
5. Heiligenberg. Stamped IBILIRI F. Forrer, Pl. XIII. 14.
6. Trèves pottery. Fölzer, Pl. XI. 1.
7. Ludowici Ta. Stamped DONATVS F. Ludowici, *Rheinzabern*.
8. Niederbieber. Stamped BETTA FECIT. Oelmann, *Niederbieber*, Pl. I. 5 A.
9. Silchester. May, *Silchester*, Pl. XXXII. 33.
10. Mainz. Stamped MAIANVS. Geissner 2, Fig. 21.
11. Mainz. Stamped IMPE]TRATVS. *Ibid.* Fig. 22.
12. Ludowici Sc. Stamped CONATIVS F. Ludowici, *Rheinzabern*.

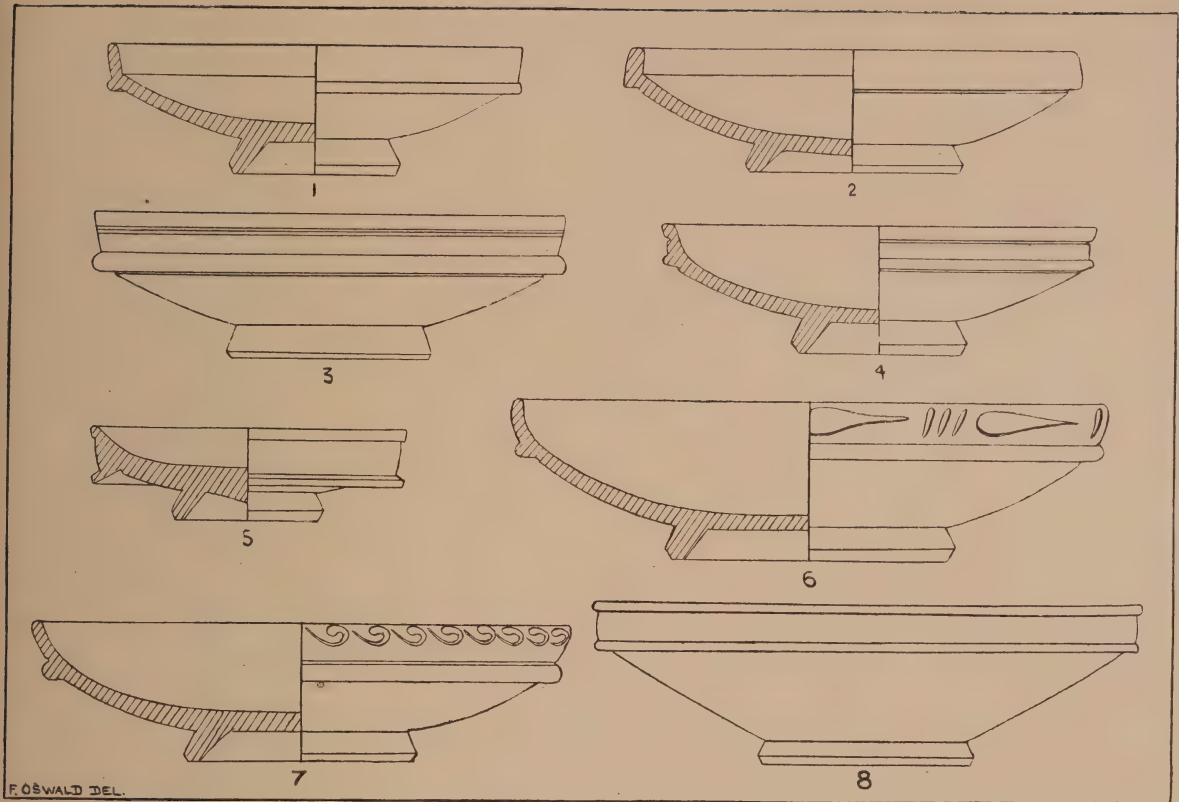
Scale  $\frac{1}{3}$ .



LUDOWICI TYPES Ta', Tk, Tm', Tr, Ts, AND Ty.

1. Heiligenberg. Forrer, Pl. XIII. 8.
2. Pfünz. Winkelmann, O.R.L. Pfünz, Pl. VII. 1.
3. Ludowici Type Tk. Rheinzabern. Stamped AMMO F. Ludowici, *Rheinzabern*.
4. Xanten grave. Steiner, *Xanten*, Pl. VII. 17.
5. Ludowici Type Tm'. Rheinzabern. Ludowici, *Rheinzabern*.
6. Ludowici Type Tr. „ *Ibid.*
7. Ludowici Type Ta'. „ „
8. Ludowici Type Ts. „ „
9. Ludowici Ty. „ „

Scale  $\frac{1}{8}$ .

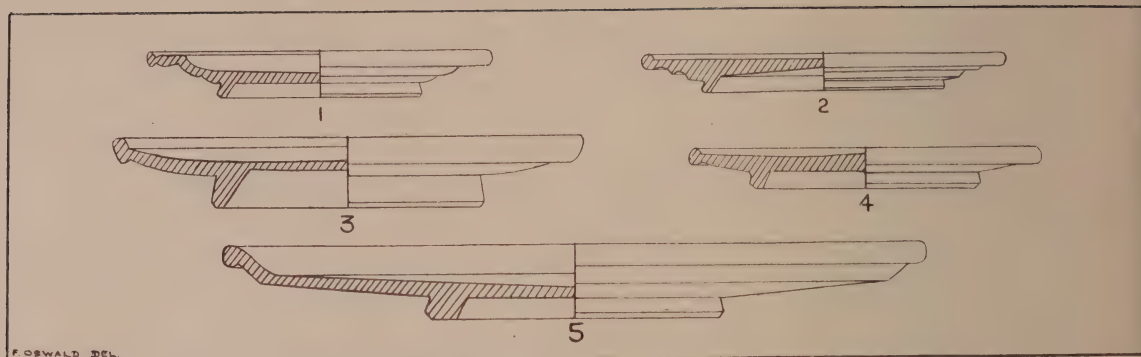


LUDOWICI TYPES Ti', Tf, Tk', Tn'.

1. Ludowici Type Ti'. Rheinzabern. Antonine. Ludowici, *Rheinzabern*.
2. Ludowici Type Tk'. Rheinzabern. Antonine. *Ibid.*
3. Strasbourg. Henning, *Strasbourg*, Pl. XVIII. 19.
4. Ludowici Type Tn'. Rheinzabern. Antonine. Ludowici, *Rheinzabern*.
5. Trèves. Fölzer, Pl. XI. 9.
6. Niederbieber. Late Second Century and Third Century. Oelmann, *Niederbieber*, Pl. I. 6 B.
7. Ludowici Tf. Rheinzabern. Stamped AISTVS FECIT. Late Second Century. Ludowici, *Rheinzabern*.
8. Redware, imitation of Sigillata. Fourth Century. Koenen, *Gefässkunde*, Pl. XVIII. 24 A.

Scale  $\frac{1}{3}$ .

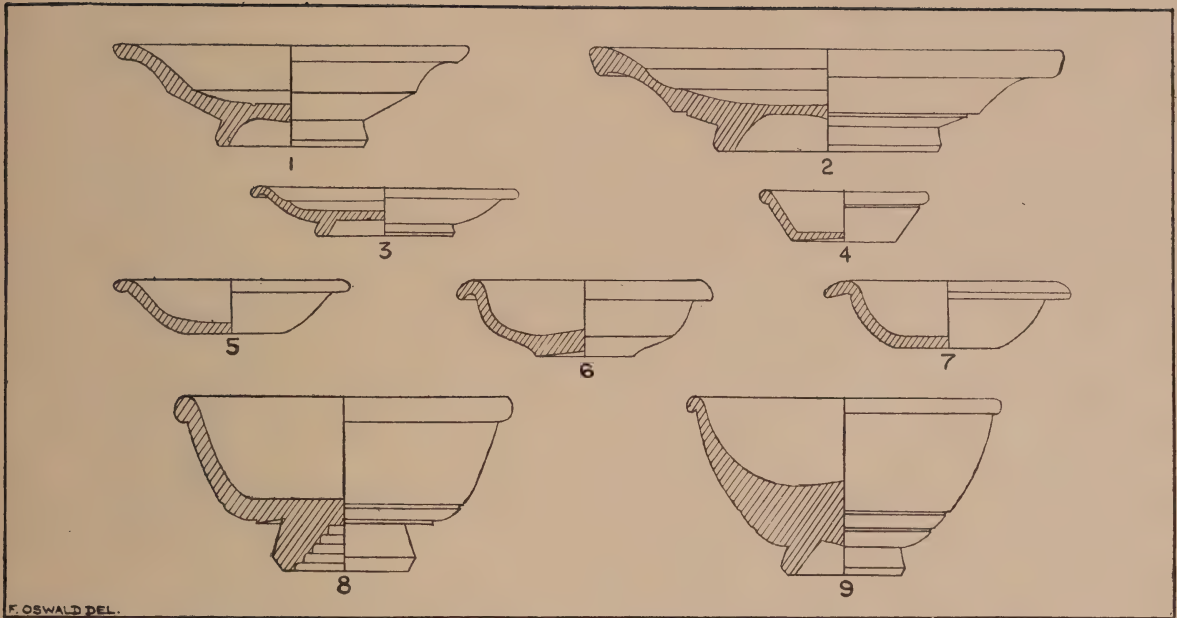




MISCELLANEOUS FLAT PLATTERS.

1. Ludowici Type Tc'. Rheinzabern. Ludowici, *Rheinzabern*.
2. Colchester Museum. (*Ad nat.*)
3. Bushe-Fox Type 84. Wroxeter. Bushe-Fox, *Wroxeter II*. Fig. 84.
4. Silchester. May, *Silchester*, Pl. XXXI. 26.
5. Ludowici Type Th'. Rheinzabern. Ludowici, *Rheinzabern*. See Trèves Grave groups 273, 335, 369. Third-Fourth Century, for somewhat similar platters.

Scale  $\frac{1}{4}$ .



MISCELLANEOUS PLATTERS AND BOWLS.

1. Ludowici Type Ti. Stamped VICTORINVS F. Rheinzabern. Mid Second Century. Ludowici, *Rheinzabern*.
2. Ludowici Type Td. Stamped DONATVS F. Rheinzabern. Mid Second Century. *Ibid*.
3. Ludowici Type Td'. Rheinzabern grave. *Ibid*.
4. Ludowici Type Te'. Rheinzabern. *Ibid*.
5. Niederbieber II A. Third Century. Oelmann, *Niederbieber*, Pl. I. II A.
6. Niederbieber II B. Third Century. *Ibid*. Pl. I. II B.
7. Ludowici Type Sd. Rheinzabern. Ludowici, *Rheinzabern*.
8. Ludowici Type Sn. Third Century. *Ibid*.
9. Niederbieber 15. Third Century. Oelmann, *Niederbieber*, Pl. I. 15.

Scale  $\frac{1}{3}$ .

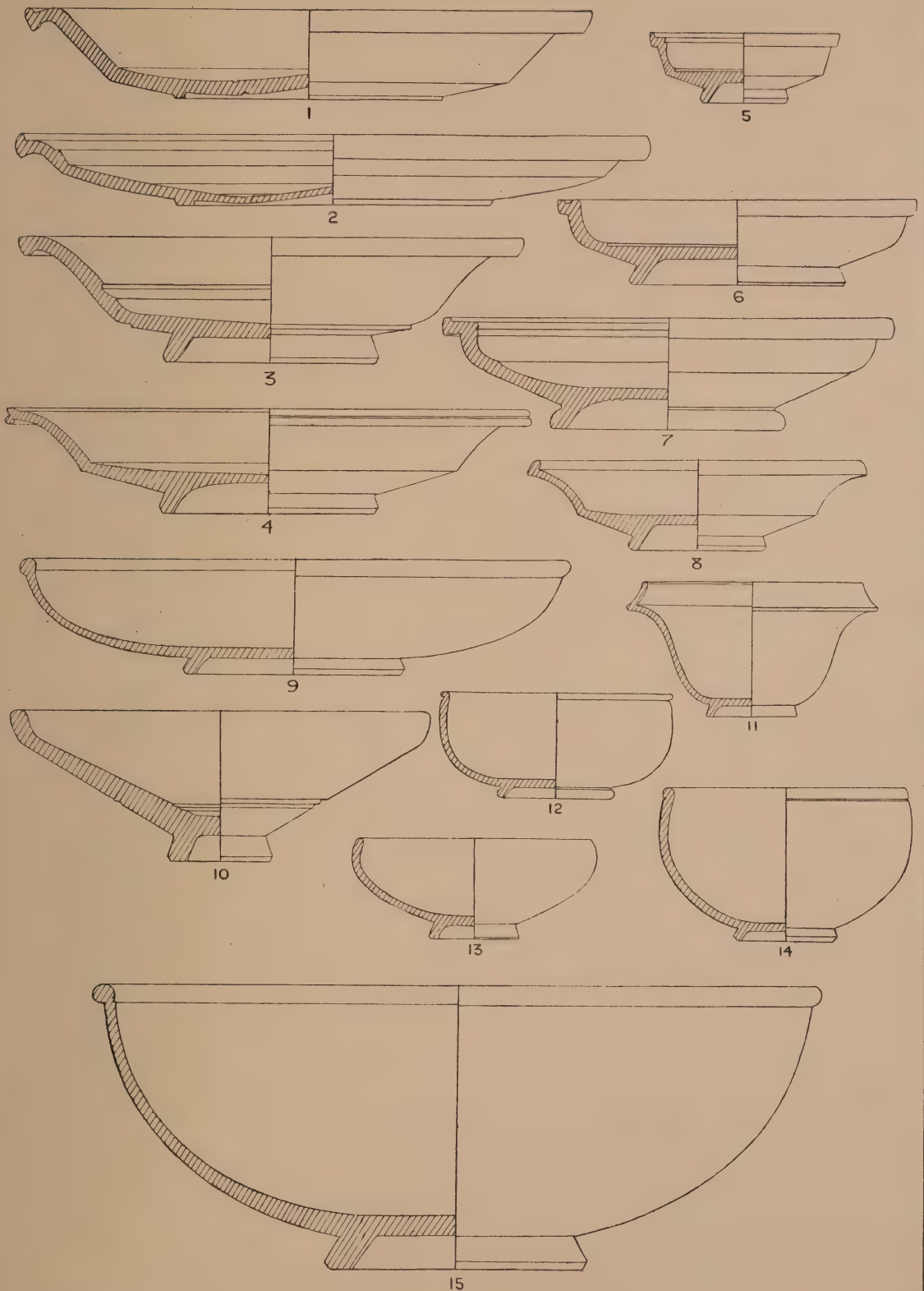
## PLATE LXVIII.

### MISCELLANEOUS PLAIN FORMS.

1. Imitation in Sigillata of Belgic form (Fig. 2). Caerwent. After Ward.
2. Loeschcke Type 72 B. Haltern. Augustan. Loeschcke, *Haltern*, Pl. XIV. 72 B.
3. Curle Type 15. Housesteads. After Ward.
4. " " Caerwent. After Ward. (A fragment in Joslin Collection, Colchester.)
5. Ludowici Type Tx. Silchester. After Ward.
6. " " Tg. Caerwent. After Ward.
7. " " " Colchester. General Collection (197.01). After Wright.
8. Curle Type 15. Bethnal Green Museum. After Ward.
9. Variant Drag. Form 32. Caerwent. After Ward.
10. Colchester. Joslin Collection. After Wright.
11. Bethnal Green Museum. After Ward.
12. Variant Ritt. Type 8. Guildhall Museum. After Ward.
13. Guildhall Museum. After Ward.
14. " " " "
15. Ludowici Type Sh. Rheinzabern. Ludowici, *Rheinzabern*.

Scale  $\frac{1}{3}$ .



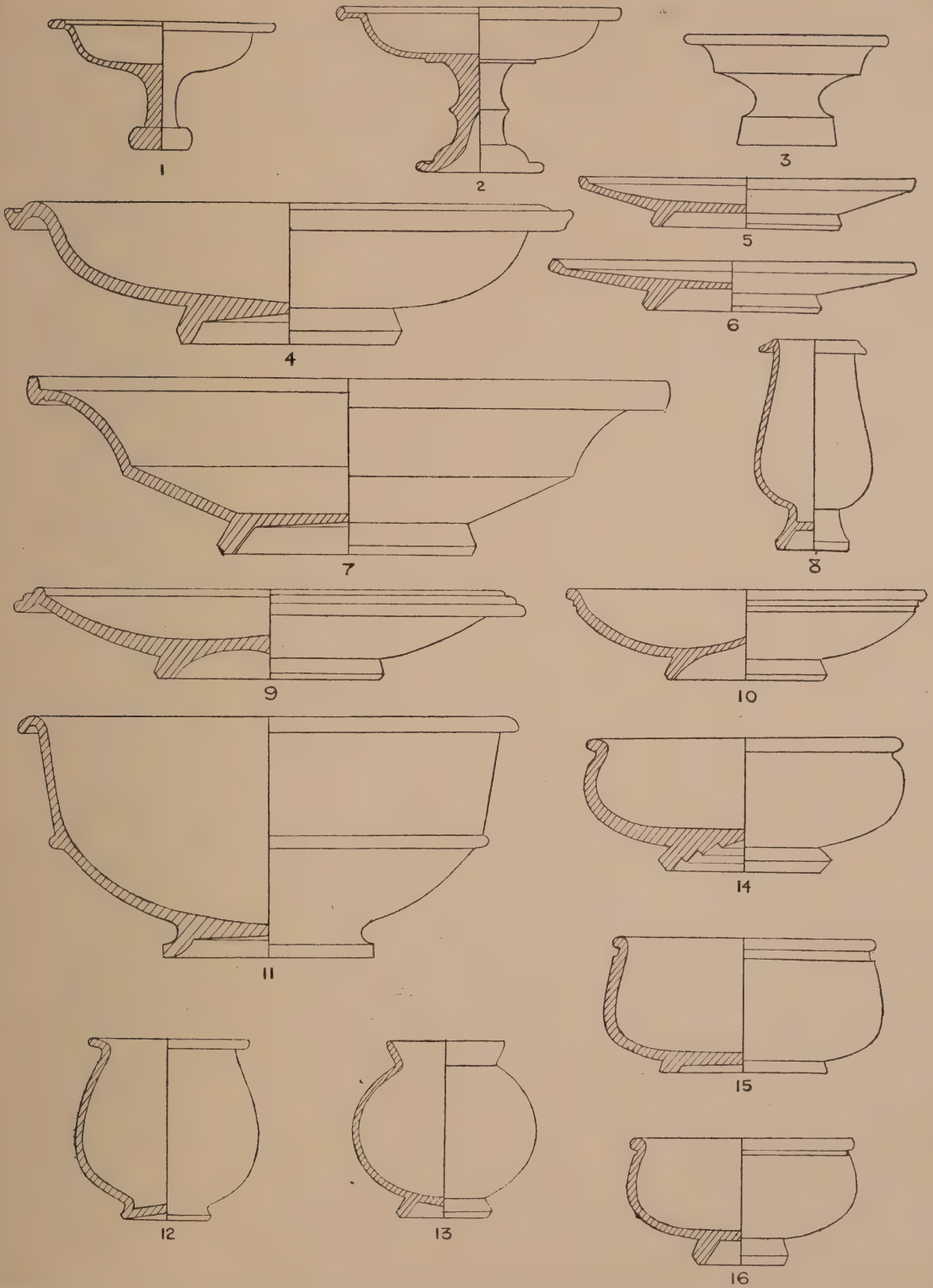


# PLATE LXIX.

## MISCELLANEOUS PLAIN FORMS.

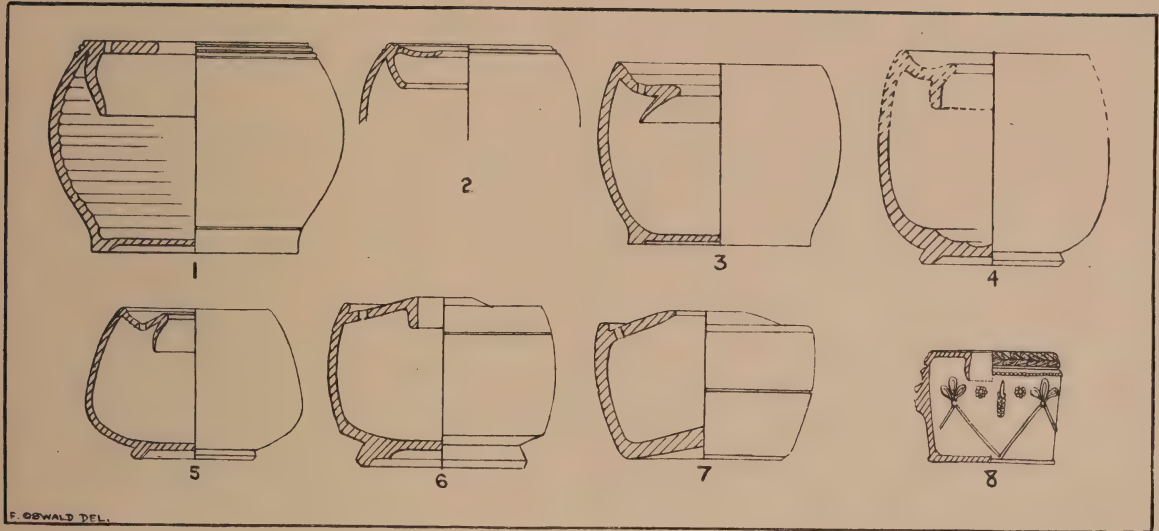
1. Dragendorff Form 50.
2. Ludowici Type Tg'. Rheinzabern. Ludowici, *Rheinzabern*.
3. London. Guildhall Museum. After Wright.
4. Ludowici Type To'. Stamped COMITIALIS F. Rheinzabern grave. Ludowici, *Rheinzabern*.
5. " " Tt'. Rheinzabern grave. *Ibid.*
6. " " Tv'. " " "
7. " " Ts'. Stamped COMITIALIS F. Rheinzabern grave. *Ibid.*
8. " " Vi. Rheinzabern. *Ibid.*
9. " " Tq'. " *Ibid.*
10. " " Tx'. Stamped PETRVLLVS F. Rheinzabern. *Ibid.*
11. " " So. Rheinzabern. *Ibid.*
12. " " Vh. Rheinzabern grave. *Ibid.*
13. " " Vk. " " *Ibid.*
14. " " Sp. Rheinzabern. *Ibid.*
15. " " Sr. " *Ibid.*
16. " " Sq. " *Ibid.*

Scale  $\frac{1}{2}$ .









## INK-POTS.

1. Loeschcke Type 38. Haltern. Reddish clay, varnished, made at Xanten. Loeschcke, *Haltern*, Pl. XI. 38.
2. Haltern. Italic ware. *Ibid.* Abb. 20, 1, partly restored.
3. Ritterling Type 13. Hofheim. Ritterling, *Hofheim*, Pl. XXXI. 13.
4. Silchester. May, *Silchester*, Pl. XXXI. 25.
5. Long Lawford, Warwickshire. Rugby Museum. Vict. County Hist. *Warwickshire*, i. p. 230.
6. Ludowici Type Aa. Rheinzabern. Antonine. Ludowici, *Rheinzabern*, p. 156.
7. Niederbieber. Third Century. Oelmann, *Niederbieber*, Pl. I. 14.
8. Albertin Museum, Dresden. Handle broken off. Lindenschmidt, *Altert. uns. heidn. Vorzeit*, Taf. 66, 1213.

Scale  $\frac{1}{2}$ .

# PLATE LXXI.

## SIGILLATA-MORTARIUM CLASS. PLATES LXXI-LXXIV.

(a) Ritterling Type 12.

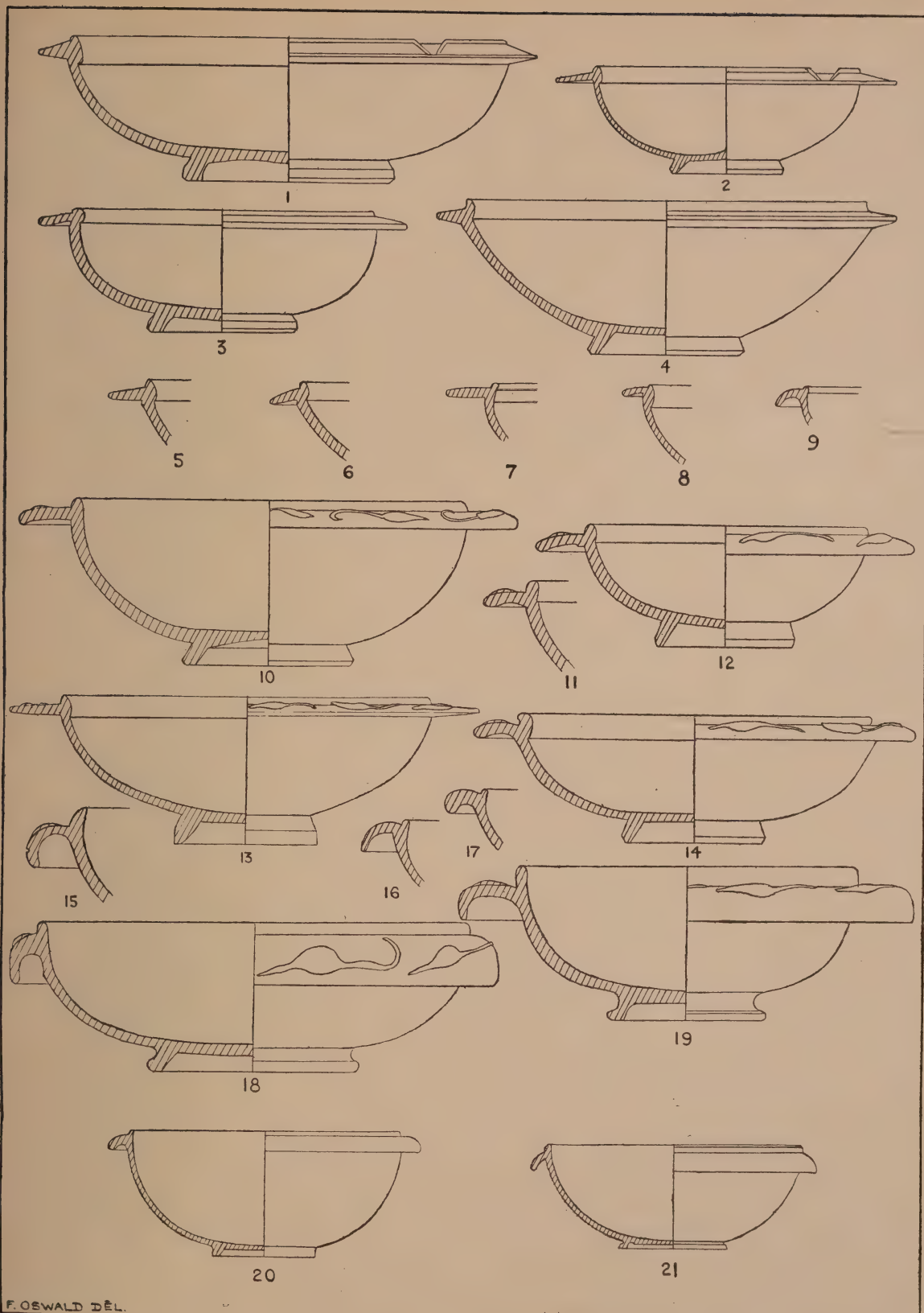
(b) Curle Type 11.

(c) Later developments.

- |         |   |  |
|---------|---|--|
| (a)     | { | 1. Ritterling Type 12. Hofheim. Claudius-Vespasian. Ritterling, <i>Hofheim</i> , Pl. XXXI. 12. |
|         |   | 2. Colchester. Probably Claudian. British Museum. ( <i>Ad nat.</i> )                           |
|         |   | 3. Aislingen. Claudius-Nero. Knorr, <i>Aislingen</i> , Pl. XVI. 22.                            |
|         |   | 4. Silchester. May, <i>Silchester</i> , Pl. XXXIII. 40.  |
|         |   | 5, 6, 8. Aislingen. Claudius-Nero. Knorr, <i>Aislingen</i> , Pl. XVI. 23-25.                   |
|         |   | 7. Margidunum. ( <i>Ad nat.</i> )  |
| (b)     | { | 9. Newstead I. Flavian. Curle, <i>Newstead</i> , Fig. 21, p. 198.                              |
|         |   | 10. Curle Type 11. Flavian. Curle, <i>Newstead</i> , Pl. XXXIX. 11.                            |
|         |   | 11. Margidunum. Flavian. ( <i>Ad nat.</i> )  |
|         |   | 12. Silchester. Flavian. May, <i>Silchester</i> , Pl. XXXIII. 38.                              |
| (c)     | { | 13. Wroxeter. Neronian. Bushe-Fox, <i>Wroxeter II</i> . Type 82.                               |
|         |   | 14. Pfünz. Trajan. Winkelmann, <i>Pfünz</i> , Pl. VII. 3 c.                                    |
|         |   | 15, 16, 17. Gellygaer. Domitian-Hadrian. Ward, <i>Gellygaer</i> , Pl. XII. 9.                  |
|         |   | 18. Silchester. Trajan-Hadrian. May, <i>Silchester</i> , Pl. XXXIII. 39.                       |
| Belgic. | { | 19. York. Trajan-Hadrian. May, <i>York</i> , Pl. IX. 10.                                       |
|         |   | 20. Ritterling Type 129. Hofheim. Ritterling, <i>Hofheim</i> , Pl. XXXVII. 129.                |
|         |   | 21. Wiesbaden. Ritterling, <i>Das Kastell Wiesbaden</i> , Pl. XIII. 17.                        |

Scale  $\frac{1}{8}$ , except Figs. 20 and 21, which are Scale  $\frac{1}{6}$ .





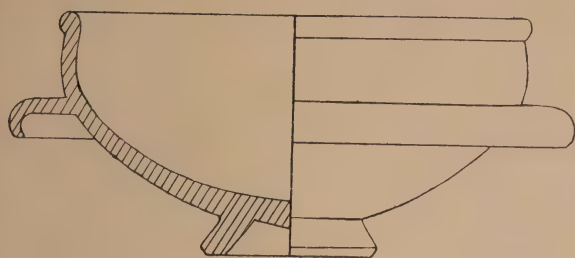
# PLATE LXXII.

## DRAGENDORFF FORM 38.

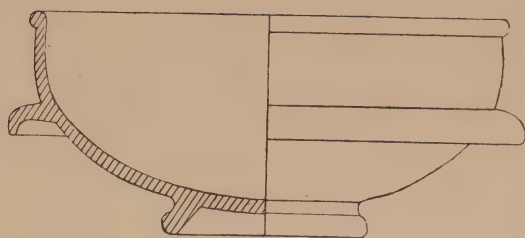
1. Newstead II. Antonine period. Curle, *Newstead*, Pl. XL. 19.
2. Silchester. Stamped ALBVCI OF. Lezoux ware. Trajan-Antonine. May, *Silchester*, Pl. XXXIV. 43.
3. Leicester. Leicester Museum. (*Ad nat.*)
4. Pfünz. Winkelmann, *Pfünz*, Pl. VII. 3.
5. Heiligenberg. Trajan-Hadrian. Forrer, Pl. XIII. 13.
6. Leicester. Leicester Museum. (*Ad nat.*)
7. Pan Rock Type 14. Lezoux. Mid Second Century. R. A. Smith, *Pan Rock*, No. 14.
8. Heiligenberg. Stamped SECVNDINVS FI. Hadrian-Antonine. Forrer, Pl. XIII. 12.
9. Leicester. Leicester Museum. (*Ad nat.*)
10. Rheinzabern. Ludowici Sd. Stamped LVCINVS F. Ludowici, *Rheinzabern*.
11. Margidunum. (*Ad nat.*)
12. Niederbieber. End Second Century. Oelmann, *Niederbieber*, Pl. I. 20.
13. Ludowici Type Si. Rheinzabern. Hadrian-Antonine. Ludowici, *Rheinzabern*.
14. Silchester. "Brick-red, brown core, coated with soft scarlet slip." Third-Fourth Century. May, *Silchester*, Pl. LIV. 93.
15. Silchester. "Light red, coated with hard scarlet slip, almost a glaze." Third-Fourth Century. May, *Silchester*, Pl. LIV. 94.
- 16 and 17. Huntcliff. 370-395 A.D. P. Newbold, *The Pottery of the Roman Fort at Huntcliff*, *Journ. Roman Studies*, ii. Fig. 40, 6, 7.

Coarse  
ware  
Imitations.

Scale  $\frac{1}{8}$ .



1



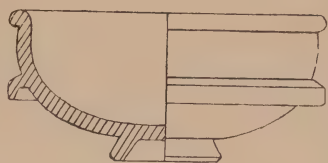
2



3



4



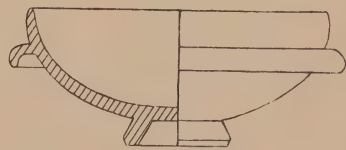
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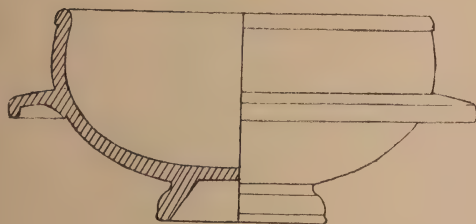
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7



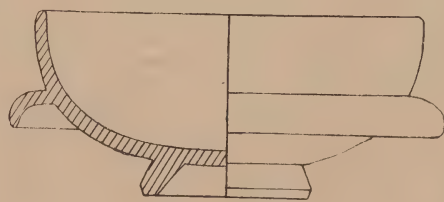
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9



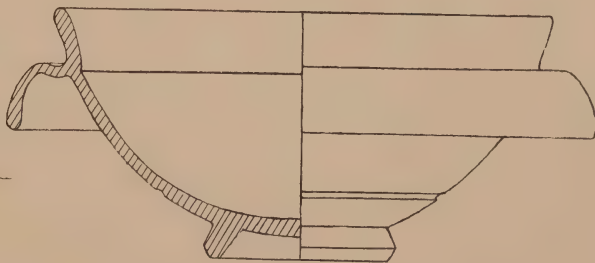
16



10



11



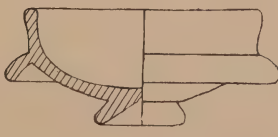
12



17



13



14



15



# PLATE LXXIII.

## CURLE TYPE 21 AND DRAGENDORFF FORM 43.

1. Curle Type 21. Newstead II. Antonine. Curle, *Newstead*, Pl. XL. 21.
- 2 & 3. " " Pfünz. Winkelmann, O.R.L. *Pfünz*, Pl. VI. Mortaria 1 and 2.
4. " " Silchester. Antonine. May, *Silchester*, Pl. XXXIV. 41.
5. Dragendorff Form 43. Ludowici Type RSd. Rheinzabern. Second half Second Century. Ludowici, *Rheinzabern*.
6. " " Ludowici Type RSc. Rheinzabern. Second half Second Century. *Ibid*.
7. " " Ludowici Type RSMd. Rheinzabern. Second half Second Century. *Ibid*.
8. " " Niederbieber. End Second Century. Oelmann, *Niederbieber*, Pl. I. 21.
9. Non-Sigillata. Silchester. Light brown, coated with golden brown mica. Probably Trèves ware of first half Second Century. May, *Silchester*, Pl. XLVIII. 61.
10. " " Silchester. Blue grey, coated with crimson slip. *Ibid*. Pl. LVI. 103.
11. Sigillata. Margidunum. (*Ad nat.*)
12. Non-Sigillata. Mortarium, stamped G. ATISIVS on one side of the spout, SABINVS on the other. End of First Century. Corbridge Report V. Fig. 9, 112.

Scale  $\frac{1}{3}$ .

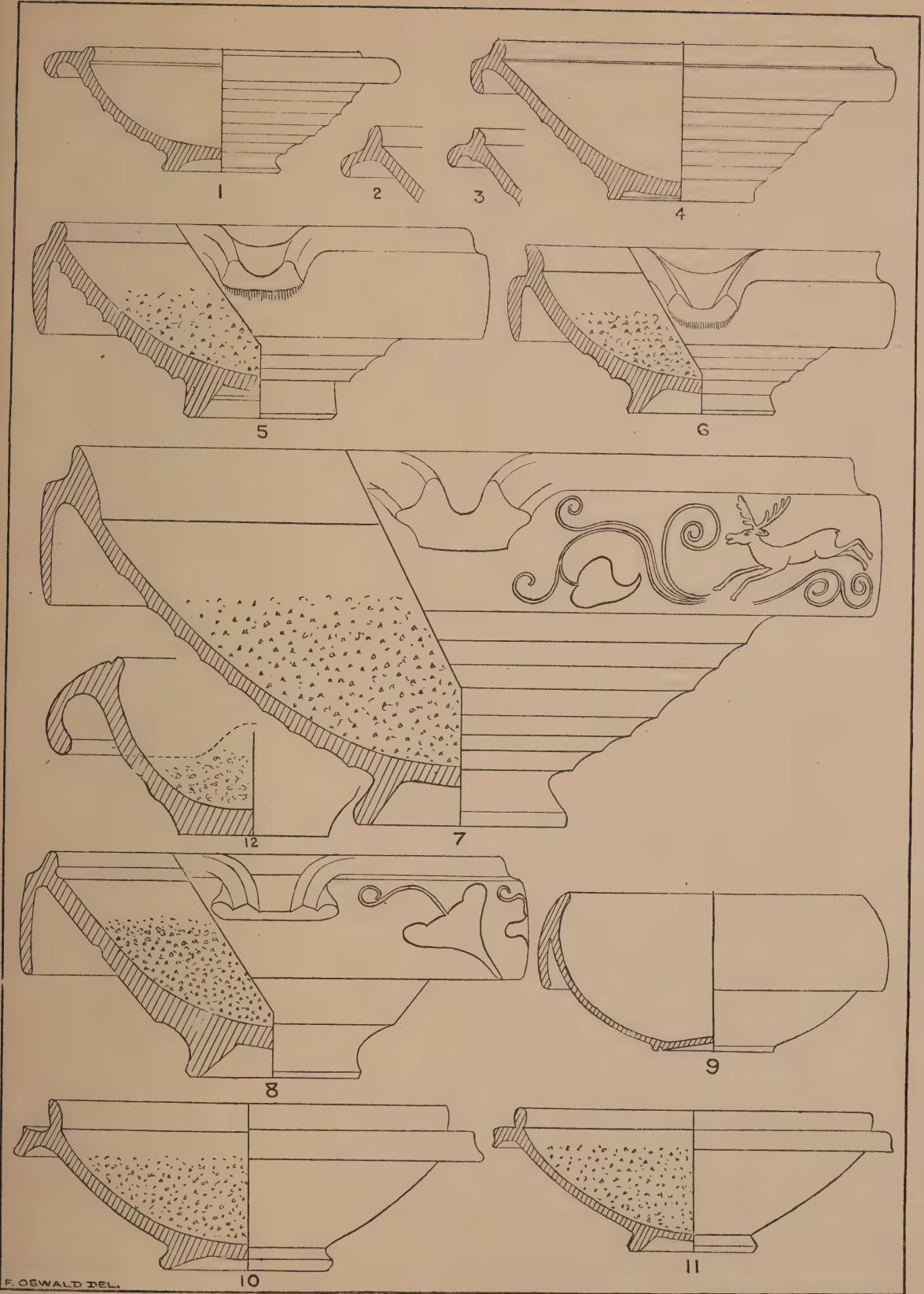


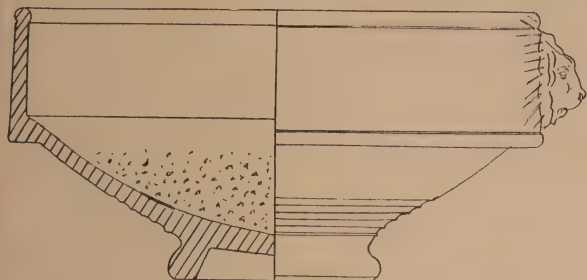
PLATE LXXIV.

DRAGENDORFF FORM 45.

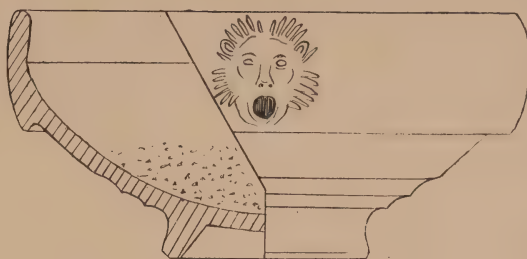
1. Lezoux. Stamped M. F. GEMINI M, GEMINI MA or GEMINI M. Late Second Century. Déch. II. Pl. IX. 2.
2. Ludowici Type RSb. Rheinzabern. Second half of Second Century. Ludowici, *Rheinzabern*.
3. Silchester. Stamped by GEMINVS. Late Second Century. May, *Silchester*, Pl. XXXIV. 42.
4. Niederbieber. End of Second Century and first half of Third Century. Oelmann, *Niederbieber*, Pl. I. 22.
5. Trèves pottery. Late Second Century into Third Century. Fölzer, Pl. XI. 12.
6. Non-Sigillata. York. Stamped MARTINVS. May, *York*, Pl. XIX. 14.
7. " " Silchester. Light brick-red, coated with scarlet slip. Third to Fourth Century. May, *Silchester*, Pl. LIV. 95.
8. " " Huntcliff. Buff clay coated with pink slip. End of Fourth Century. Newbold, *Journ. Roman Studies*, ii. Fig. 40, 1.

Scale  $\frac{1}{3}$ .

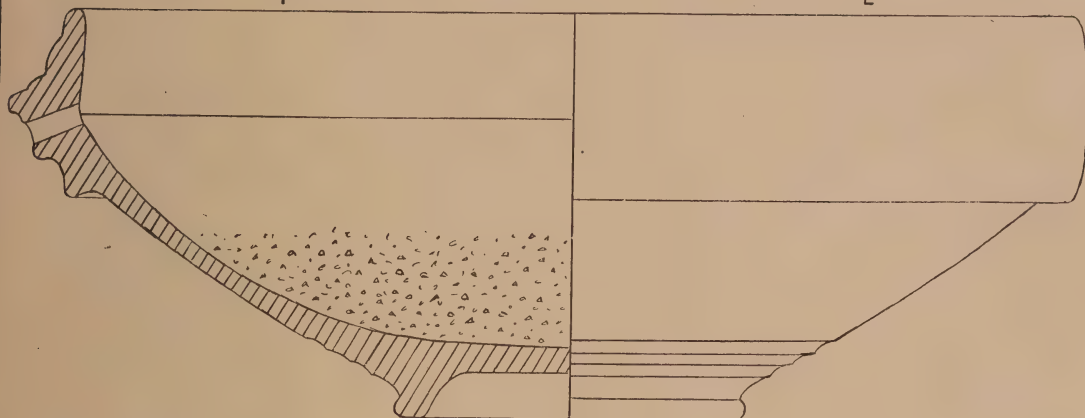




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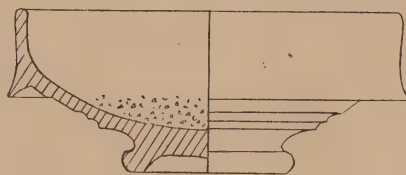
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3



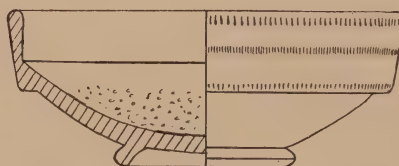
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6



7



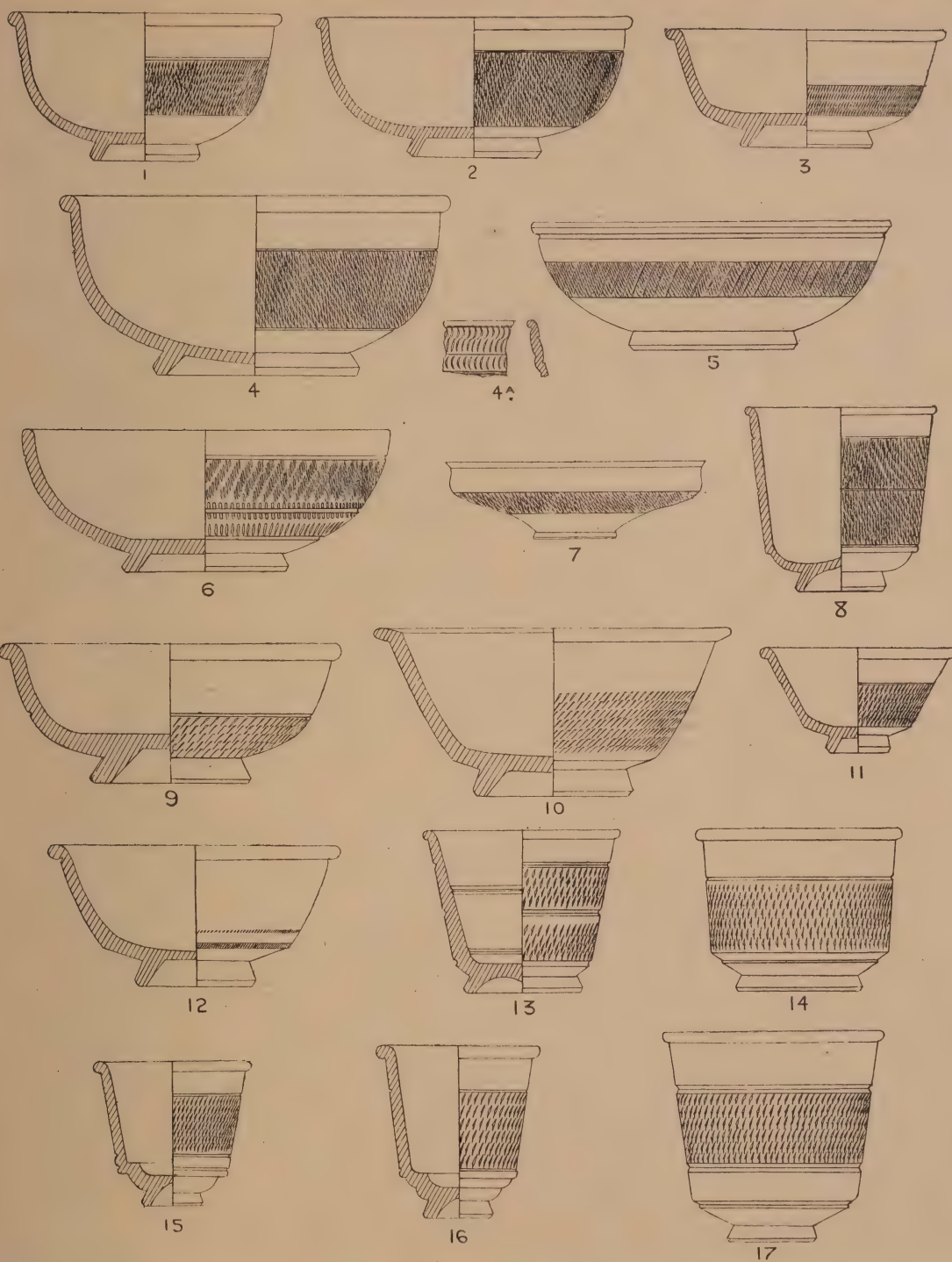
8

PLATE LXXV.

ROULETTED TECHNIQUE.

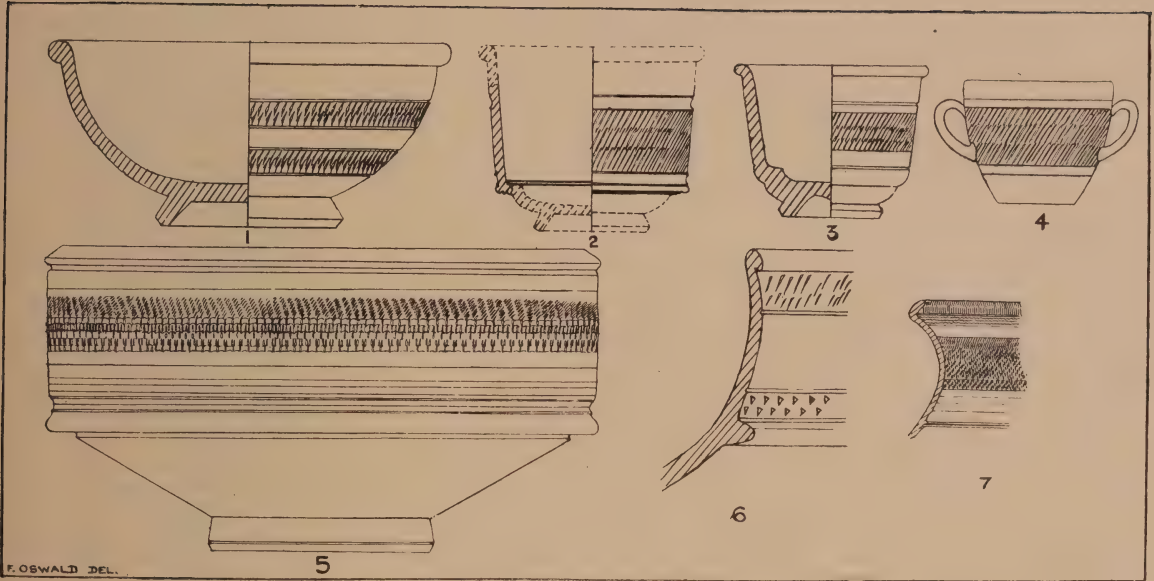
1. Form 37. Heiligenberg. Hadrianic. Forrer, Pl. XIII. 9.
2. „ „ Leicester. Probably Heiligenberg ware. Leicester Museum. (*Ad nat.*)
3. Form 37/31. York. Antonine. May, *York*, Pl. IX. 13.
4. Form 37. Niederbieber. Oelmann, *Niederbieber*, Pl. I. 16.
- 4 A. Form 29, rim with notched rouletting. Margidunum. (*Ad nat.*)
5. Form 37. Antonine graves in the Rhine district. Koenen, *Gefässkunde*, Pl. XVI. 23.
6. Form 37/32. Ludowici Type SSb. Rheinzabern. Ludowici, *Rheinzabern*.
7. Dragendorff Form 48.
8. Form 30. Koenen, *Gefässkunde*, Pl. XIII. 13.
9. Form 37. Ludowici Type SSa. Rheinzabern. Ludowici, *Rheinzabern*.
10. Form 31/37. Ludowici Type SSc. Rheinzabern. *Ibid.*
11. Form 33 variant. Dragendorff Form 49.
12. Form 31/37. Niederbieber. Oelmann, *Niederbieber*, Abb. 5.
13. Form 30 variant. Colchester. *Joslin Coll.* After A. G. Wright.
14. „ „ „ Guildhall. Catalogue, Pl. XLV. 6.
15. Form 30. Heiligenberg. Forrer, Pl. XIII. 15.
16. „ „ „ „ *Ibid.* Pl. XIII. 16.
17. Form 30 variant. Guildhall. Catalogue, Pl. XLV. 8.

Scale  $\frac{1}{3}$ .









ROULETTED TECHNIQUE.

1. Ludowici Se. Rheinzabern. Antonine. Ludowici, *Rheinzabern*.
2. Margidunum. Ditch 3. Trajan. (*Ad nat.*)
3. Rottweil. Hölder, *Die Formen der röm. Thongefässe diesseits und jenseits der Alpen*.
4. Innsbruck. *Ibid.*
5. Remagen. Second half Third Century. Lehner, *Bonn Jahrb.* 94/95, p. 213.
6. Trèves. Third Century. Fölzer, Pl. XI. 26.
7. Silchester. Form 67. Reading Museum. (*Ad nat.*)

Scale  $\frac{1}{2}$ .

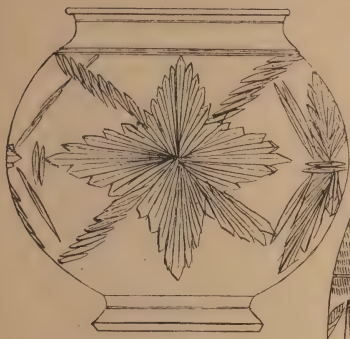
PLATE LXXVII.

INCISED SIGILLATA, MOSTLY DÉCHELETTE FORM 72.

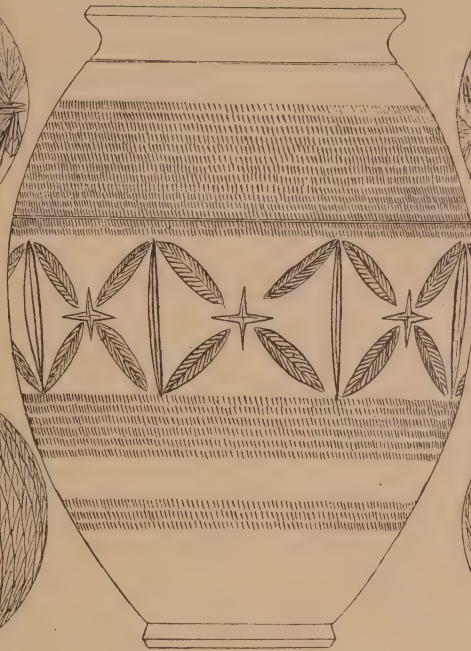
1. Form 72. Lezoux. Déchelette II. Pl. V. 1.
2. Lezoux ware. Digoin (Saône and Loire). *Ibid.* Pl. V. 2.
3. Lezoux. *Ibid.* Pl. V. 3.
4. Ludowici VSe. Rheinzabern. Second half Second Century. Ludowici, *Rheinzabern*.
5. Pfünz. Beaker 2. Third Century (?): Winkelmann, *Pfünz*, Pl. VII.
6. Oelmann 24 b. Niederbieber. End Second Century. Oelmann, *Niederbieber*, Pl. I. 24 b.
7. Ludowici VSb. Rheinzabern. Second half Second Century. Ludowici, *Rheinzabern*.
8. Ludowici VSd. Rheinzabern. Second half Second Century. *Ibid.*

Scale  $\frac{1}{3}$ .





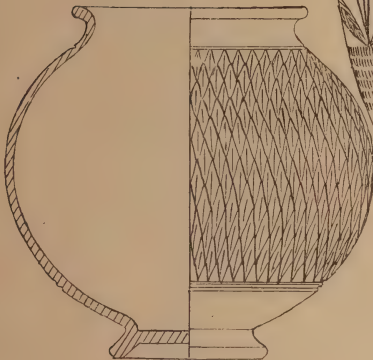
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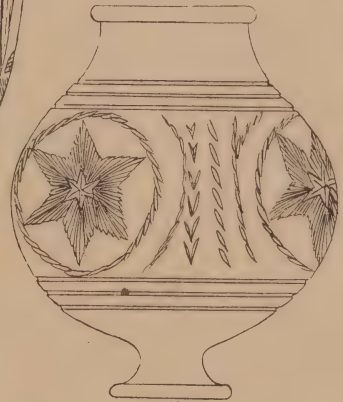
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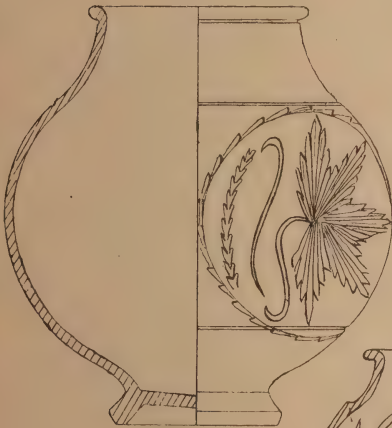
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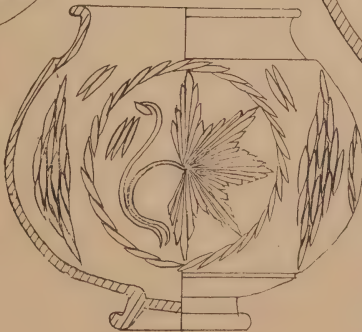
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6

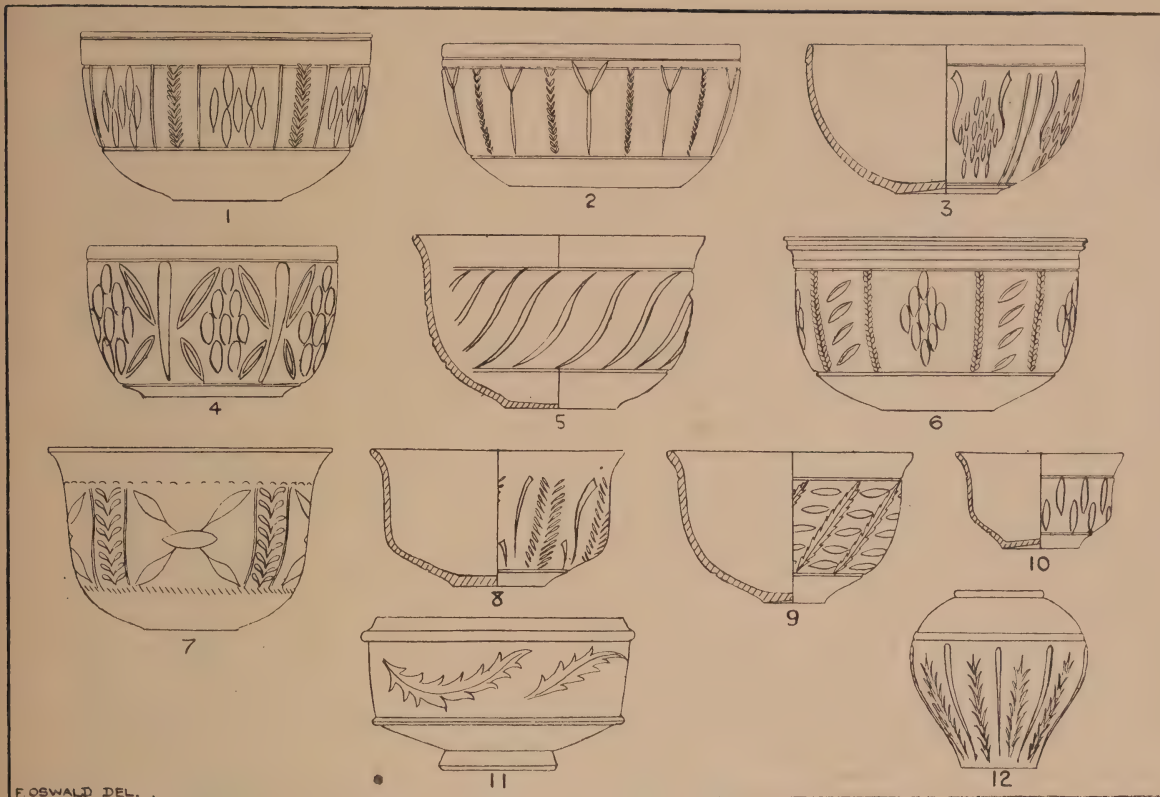


8



7





INCISED SIGILLATA, DRAGENDORFF FORM 41.

1. Strasbourg. Middle of Second Century. Henning, *Strasbourg*, Pl. XVIII. 6.
2. " " " " " *Ibid.* Pl. XVIII. 1.
3. Bonn and Niederbieber. End of Second Century. Oelmann, *Niederbieber*, Pl. I. 12 A.
4. Strasbourg. Middle of Second Century. Henning, *Strasbourg*, Pl. XVIII. 7.
5. Ludowici Type 3Sa. Rheinzabern. Second half of Second Century. Ludowici, *Rheinzabern*.
6. Strasbourg. Second half of Second Century into Third Century. Henning, *Strasbourg*, Pl. XVIII. 2.
7. Mainz. Third Century (?). Hölder, *Formen der röm. Thongefässe, etc.*, Pl. XXI. 13.
8. Niederbieber. Third Century. Oelmann, *Niederbieber*, Pl. I. 12 B.
9. Ludowici Type 3Sc. Rheinzabern. Ludowici, *Rheinzabern*.
10. Ludowici Type 3Sb. Rheinzabern. *Ibid.*
11. Ludowici SMc. Trèves. Hölder, *op. cit.* Pl. XXI. 14.
12. Urn. Bregenz. *Ibid.* Pl. VII. 7.

Scale  $\frac{1}{3}$ .

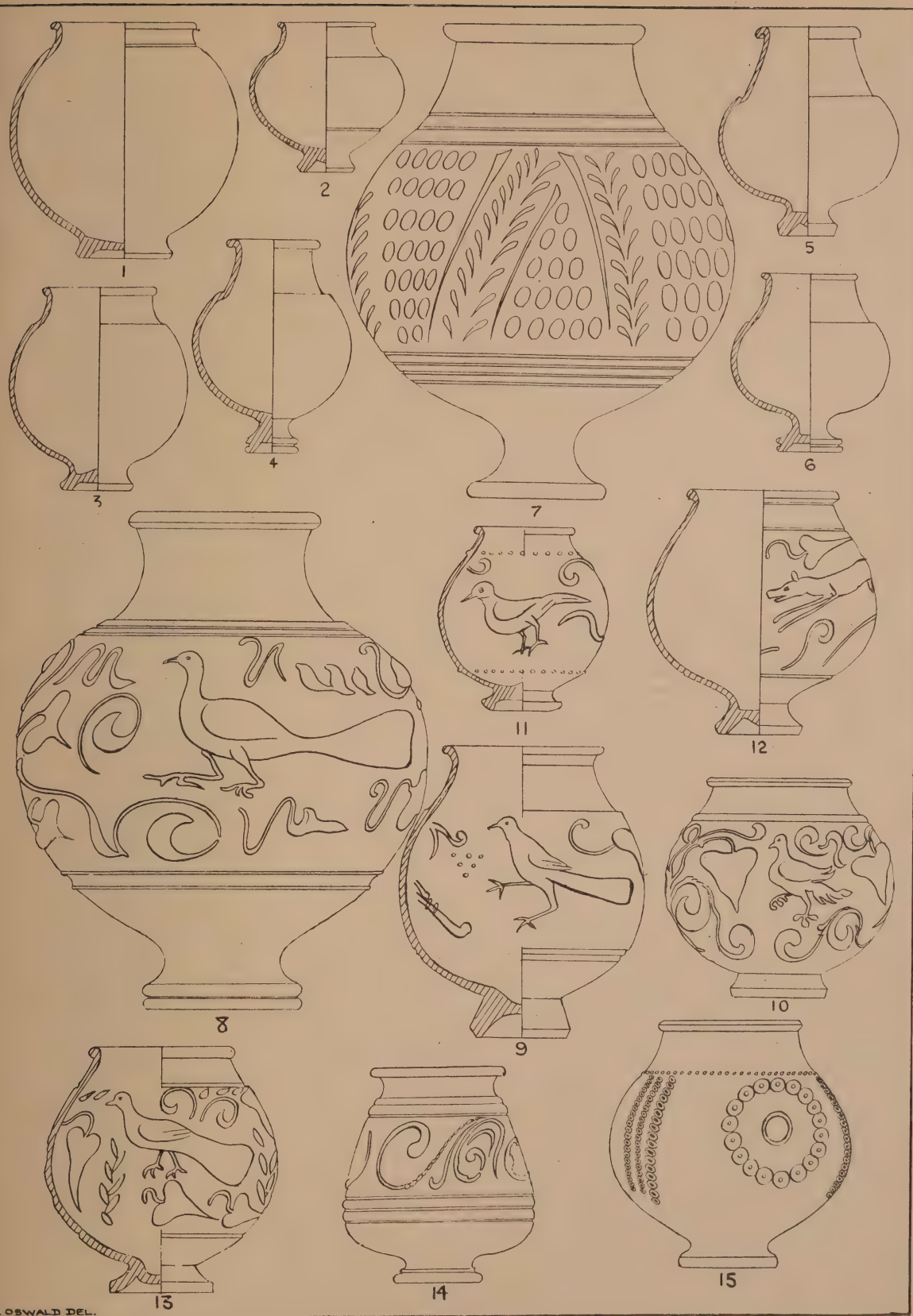


# PLATE LXXIX.

## CUT-GLASS AND BARBOTINE TECHNIQUE. DÉCHELETTE FORM 72 ; DRAGENDORFF FORM 54.

- |                         |   |   |
|-------------------------|---|---|
| Plain<br>forms.         | { | 1. York. May, <i>York</i> , Pl. V. 2.   |
|                         |   | 2. Niederbieber 24 A. Oelmann, <i>Niederbieber</i> , Pl. I. 24 A.                   |
|                         |   | 3. Ludowici Type Vd. Rheinzabern. Ludowici, <i>Rheinzabern</i> .                    |
|                         |   | 4. Ludowici Type Ve. Rheinzabern. <i>Ibid.</i>                                      |
|                         |   | 5. Ludowici Type Vf. Rheinzabern. <i>Ibid.</i>                                      |
|                         |   | 6. Ludowici Type Vg. Rheinzabern. <i>Ibid.</i>                                      |
| Cut-glass<br>technique. | } | 7. Westerndorf. Munich. Hölder, <i>Formen der röm. Thongefässen</i><br>Pl. VII. 10. |
|                         |   |   |
| With<br>barbotine.      | { | 8. Mainz. Rheinzabern ware (?). Hölder, <i>op. cit.</i> Pl. VII. 2.                 |
|                         |   | 9. Ludowici Type VMg. Rheinzabern. Ludowici, <i>Rheinzabern</i> .                   |
|                         |   | 10. Karlsruhe. Rheinzabern ware (?). Hölder, <i>op. cit.</i> Pl. VII. 6.            |
|                         |   | 11. Ludowici Type VMi. Rheinzabern. Ludowici, <i>Rheinzabern</i> .                  |
|                         |   | 12. Niederbieber 24 c. Oelmann, <i>Niederbieber</i> , Pl. I. 24 c.                  |
|                         |   | 13. Ludowici Type VMK. Rheinzabern. Ludowici, <i>Rheinzabern</i> .                  |
|                         |   | 14. Bonn. Hölder, <i>op. cit.</i> Pl. VII. 4.                                       |
| With<br>white<br>paint. | { | 15. Niederbieber 24 D. Bonn Museum. Behn, <i>Röm. Keramik</i> , Abb.<br>16, 4.      |
|                         |   |   |

Scale  $\frac{1}{3}$ .



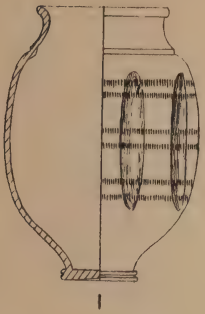
# PLATE LXXX.

## CUT-GLASS AND BARBOTINE TECHNIQUE.

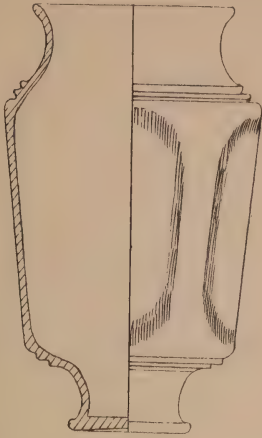
1. Ludowici Type Vb. Rheinzabern. Ludowici, *Rheinzabern*.
2.   "   "   Va.       "       *Ibid.*
3.   "   "   VSa.       "       *Ibid.*
4.   "   "   VSc.       "       *Ibid.*
5.   "   "   VMa.       "       *Ibid.*
6.   "   "   VMd.       "       *Ibid.*
7.   "   "   VMh.       "       *Ibid.*
8.   "   "   VMc.       "       *Ibid.*
9.   "   "   Vc.       "       *Ibid.*
10.   "   "   VWb.       "       *Ibid.*
11.   "   "   VWa.       "       *Ibid.*
12. Barbotine. Yellow-red, with letters in white. Third-Fourth Century. Koenen, *Gefäßskunde*, Pl. XVIII. 15.

Scale  $\frac{1}{3}$ .

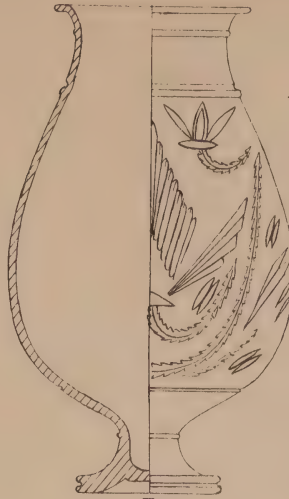




1



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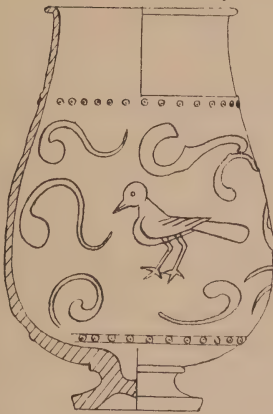
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4



5



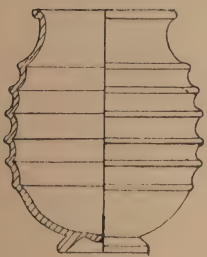
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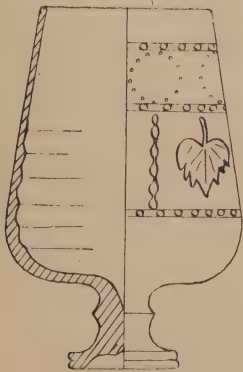
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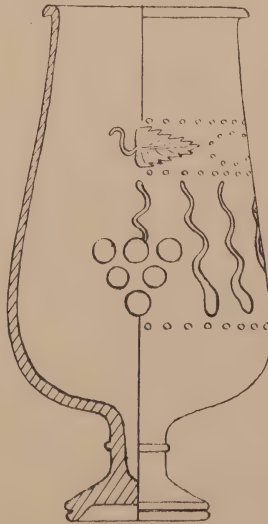
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9



10



11



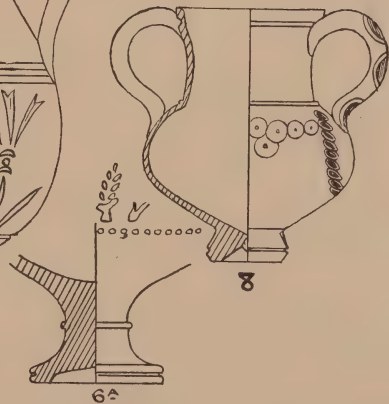
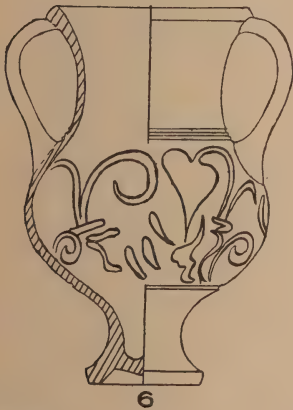
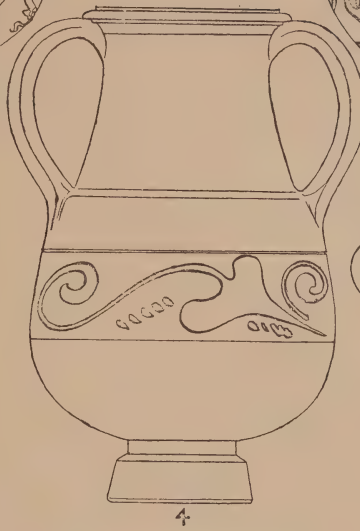
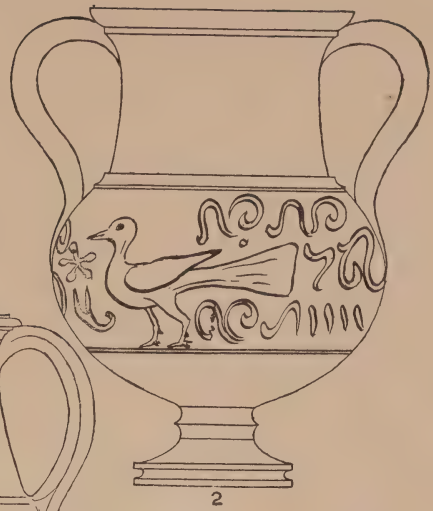
12

PLATE LXXXI.

CUT-GLASS AND BARBOTINE TECHNIQUE (EXCEPT FIG. 1).

1. Arretine crater. Verona. Hölder, *Formen der röm. Thongefässe*, Pl. III. 7.
2. With barbotine. Bethnal Green Museum. (*Ad nat.*)
3. Drag. Form 53. Pfünz. With barbotine. Mainz Museum. Hölder, *op. cit.* Pl. III. 2.
4. With barbotine. Fürstenfeldbruch-Mürchen. Hölder, *op. cit.* Pl. III. 8.
5. Colchester Museum. Brick-red ware with burnished surface. Non-Sigillata. (After A. G. Wright.)
6. Ludowici Type VMe, with barbotine. Rheinzabern. Ludowici, *Rheinzabern*.
- 6A. Base of Type VMd, otherwise similar to VMe. *Ibid.*
7. With cut-glass technique. Bregenz, grave. Hölder, *op. cit.* Pl. III. 10.
8. Niederbieber, with white paint. Oelmann, *Niederbieber*, Pl. I. Type 26 B.

Scale  $\frac{1}{3}$ .



FORWALD DEL.



## PLATE LXXXII.

### INCISED AND BARBOTINE TECHNIQUE.

1. Cut-glass technique. Bonn. Hölder, *Formen d. Röm. Thongefässe*, Pl. XV. 6.
2. Ludowici Type Kc. Rheinzabern. Ludowici, *Rheinzabern*.
3. Trèves. Moulded. Hölder, *op. cit.* Pl. XV. 8.
4. Cut-glass technique. Koenen, *Gefässkunde*, Pl. XVIII. 14.
5. Barbotine and white colour. *Ibid.* Pl. XVII. A.
6. Barbotine. *Ibid.* Pl. XVIII. 17.
7. Bonn. White barbotine. Hölder, *op. cit.* Pl. XIV. 3.
8. Rottweil. Hölder, *Röm. Thongef.* Pl. VIII. 7.
9. Oelmann 28 c. Cologne. Fourth Century. White paint. Oelmann, *Niederbieber*, Abb. 11, 3.
10. Oelmann 28 d. Nymegen. White paint. A similar jug in skeleton grave at Vermand. *Ibid.* Abb. 11, 4.
11. Bonn. Hölder, *op. cit.* Pl. XIV. 11.
12. Oelmann 28 b. Cologne. White barbotine. First half of Third Century. Oelmann, *Niederbieber*, Abb. 11, 2.

Scale  $\frac{1}{3}$ .



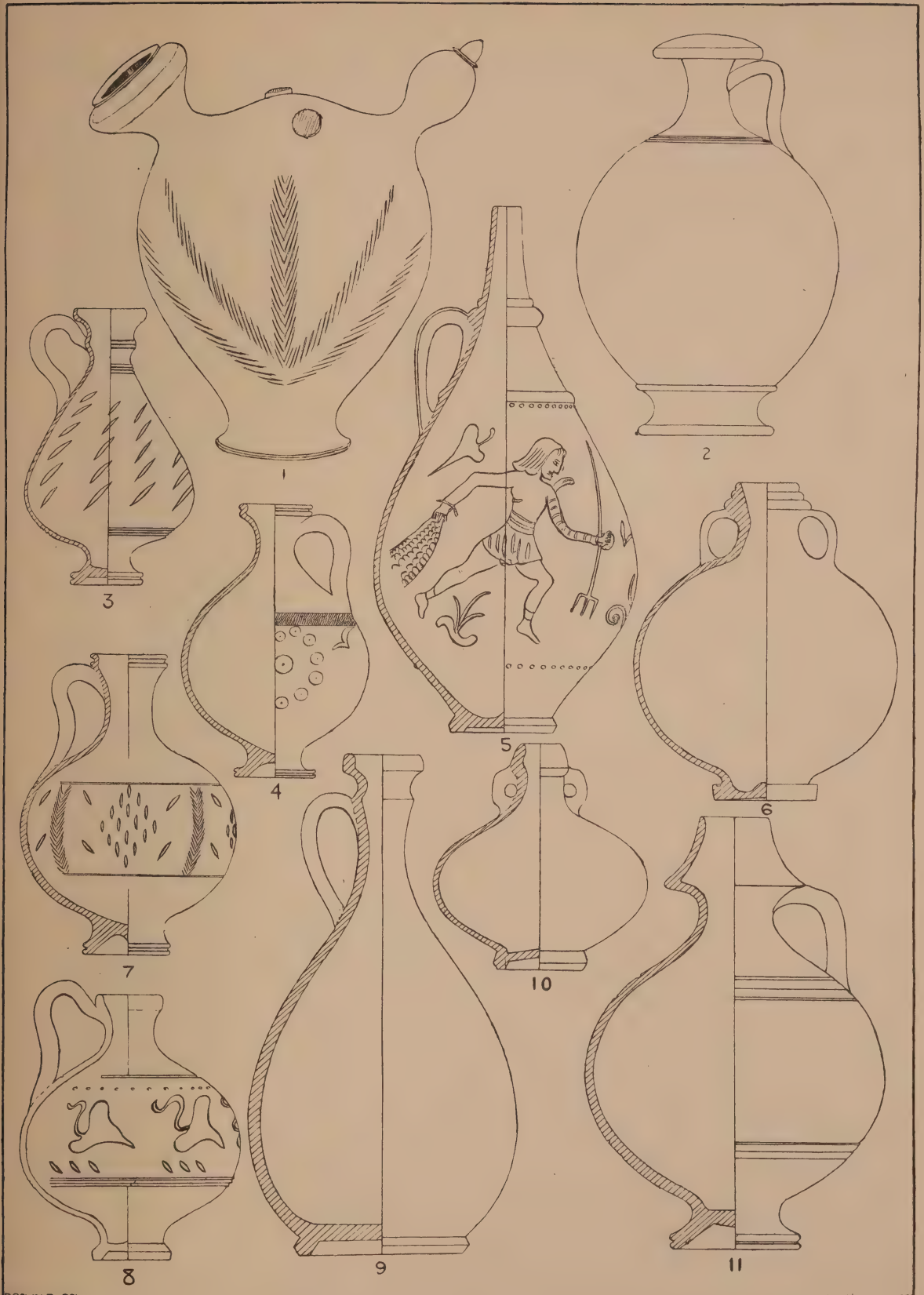
## PLATE LXXXIII.

### INCISED AND BARBOTINE TECHNIQUE.

1. London, King William Street. *Archaeologia*, lxvi. 1915, Pl. XXV. 2.
2. York. May, *York*, Pl. V. 1.
3. Ludowici Type KS. Rheinzabern. Ludowici, *Rheinzabern*.
4. Bonn Museum. White painted and with rouletted zone. Oelmann, *Niederbieber*, Abb. 10, 6.
5. Ludowici Type KMa. Barbotine. Ludowici, *Rheinzabern*.
6. Ludowici Type Ka. *Ibid*.
7. Bonn Museum. Cut-glass technique. Oelmann, *Niederbieber*, Abb. 10, 7.
8. Ludowici Type KMb. Rheinzabern. Ludowici, *Rheinzabern*.
9. Niederbieber 28 A. Oelmann, *Niederbieber*, Abb. 11, 1.
10. Ludowici Type Kb. Rheinzabern. Ludowici, *Rheinzabern*.
11. Niederbieber 27. Third Century. (The conical mouth still occurs in skeleton graves.) Oelmann, *Niederbieber*, Pl. I. 27.

Scale  $\frac{1}{3}$ .





## PLATE LXXXIV.

### SIGILLATA DECORATED WITH APPLIED RELIEFS.

1. Déch. Form 72. Cornhill, London. Walters, *C.R.P.* M 2365, Pl. XXXII., and C. Roach Smith, *Cat. Mus. of London Antiquities*, 1854, Pl. VI.
2. Déch. Form 72, var. *k*. Lezoux. Déchelette II. p. 185, *k*.
3. Déch. Form 73. Bernard (Vendée). Déchelette II. Pl. I. (2).
4. Déch. Form 74. Védrine (Puy de Dôme), Moulins Museum. Also found at Lezoux. Déchelette II. Pl. I. (3).
5. Arretine. Heudebonville (Eure), Orleans Museum. Déchelette II. p. 189, *l*.
6. Déch. Form 75. Lezoux. Déchelette II. Pl. II. (4).
7. York. May, *York*, Pl. IV. 1.
8. Déch. Form 76. (Vases of the Rhone valley.) Lyon. Probably made at Vienne, where the majority are found. Three medallions alternating with three handles. Déchelette II. p. 236 *m*, and Pl. II. (6).

Scale  $\frac{1}{3}$ .

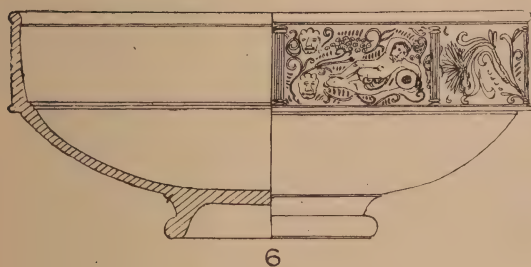
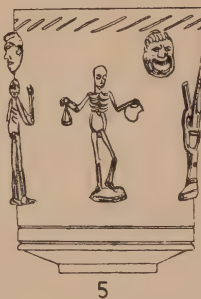
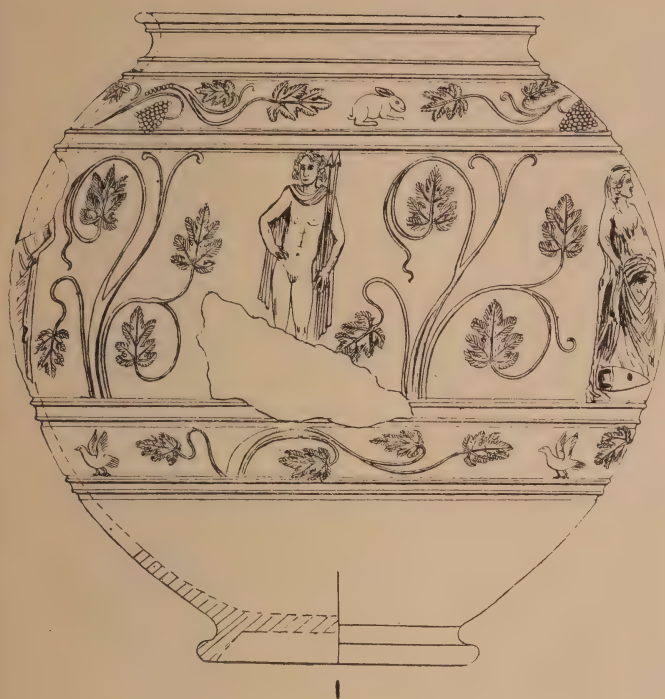




PLATE LXXXV.

1. Jug probably by SABINVS (S I . . . . .). Vindonissa. Nero-Vespasian period. Knorr, *Aislingen*, Text Fig. 5.
2. Jug stamped SABINI M. Hartlip. Nero-Vespasian period. C. R. Smith, *Collect. Antiq.* ii. p. 13, and from a photograph by D. Atkinson.
3. Déchelette Form 62 (in green glaze). St. Rémy.
4. Nymegen. Nero-Vespasian period. Knorr, *Terra Sigillata*, 1919, Text Fig. 33.
5. Déchelette Form 63 (in green glaze). Vichy.
6. Ape's head (appendage to a vessel), restored. Mainz. Behn, *Röm. Keramik*, Abb. 18.
7. Lamp; negro (front view) and camel (side view). London, Guildhall Museum Catal. Pl. IX. 5.

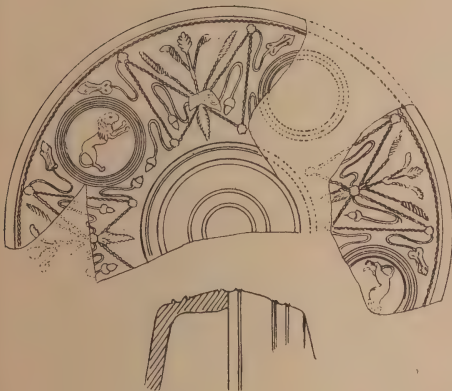
All  $\frac{1}{3}$  nat. size, excepting 3, 5, and 6.



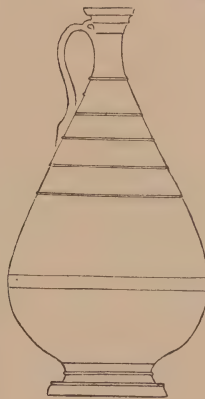
1



2



4



3



6



5



7



















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